Plowman et al. 8600 - 9294

RECURD



FOTO FINISH

3107 N. Broadway Chicago, II. 60657 929-9050

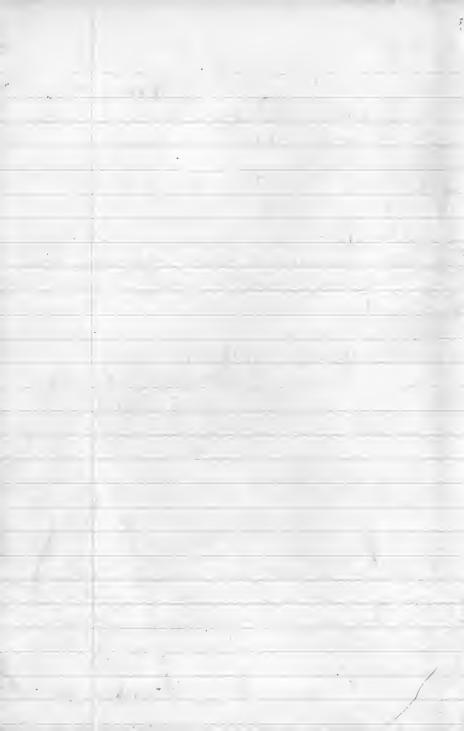
| | | | | | | - | | _ | _ | | _ | | | | | _ |
|------|----------------------------|---------------------|--------------------------|--------------------------|---------------------------|--------------------------|---------------------------|------|---------------------|--------------------------|---------------------|---------------------------|---------------------------|---------------------------|--------------------------|---|
| 1111 | S | M | T | W | T | F | 8 | | S | M | T | W | T | F | S | |
| JAN | 6 13 20 27 | 7 14 21 28 | 1 8 15 22 29 | 9 16 23 30 | 3 10 17 24 31 | 11 18 25 | 5 12 19 26 | 101. | 6 13 20 27 | 7 14 21 28 | 1 15 22 29 | 9 16 23 30 | 3 10 17 24 31 | 11 18 25 | 5 12 19 26 | |
| FEB | 10 17 24 | 4 11 18 25 | 5 12 19 26 | 6 13 20 27 | 7 14 21 28 | 1 8 15 22 29 | 9 16 23 | AUG | 3 10 17 2% | 4 11 18 25 | 5 12 19 26 | 6 13 20 27 | 7 14 21 28 | 1 8 15 22 29 | 9 16 23 30 | |
| MAI | 16 | 3 10 17 2% | 4 11 18 25 | 5 12 19 26 | 6 13 20 27 | 7 14 21 28 | 1 8 15 22 29 | SEP | 7 14 21 28 | 1 8 15 22 29 | 9 16 23 30 | 3 10 17 24 | 11 18 25 | 5 12 19 26 | 6 13 20 27 | |
| APR | 6 13 20 27 | 7 14 21 28 | 1 8 15 22 29 | 2 9 18 23 30 | 3 10 17 24 | 4 11 18 25 | 5 12 19 26 | DCT | 5 12 19 26 | 6 13 20 27 | 7 14 21 28 | 1 8 15 22 29 | 9 16 23 30 | 3 10 17 24 31 | 4 11 18 25 | |
| MAY | 11 18 25 | 5 12 19 26 | 6 13 27 | 7 14 21 28 | 1 8 15 22 29 | 9 16 23 30 | 3 10 17 24 31 | HOL | 9 | 3 10 17 24 | 11 18 25 | 5 12 19 26 | 6 13 20 27 | 7 14 21 28 | 1 8 15 22 29 | |
| NOT | E 1 8 15 22 29 | 9 16 23 30 | 3 10 17 24 | 11 18 25 | 5 12 19 26 | 6 13 20 27 | 7 14 21 28 | DEC | 7 14 21 28 | 1 8 15 22 29 | 9 16 23 30 | 3 10 17 24 31 | 11 18 25 | 5 12 19 26 | 6 13 20 27 | |

CRPT BOT Plowman OFF

VERNON McMILLAN Inc.

5 9 8 2 cu. centimeter = 0.06 cubic inch sq. centimeter = 0.16 square inch 1 cubic meter = 250 gallons 1 horsepower = 0.75 kilowatt METRIC EQUIVALENTS 1 sq. meter = 1.2 square yards 1 sq. meter = 11 square feet 1 kilometer = 0.6 mile millimeter = 0.04 inch 1 sq. yard = 0.8 square meter 1 sq. inch = 6.5 sq. centimeters 1 sq. foot = 0.09 square meter 1 kilowatt = 1.3 horsepower kilogram = 2.2 pounds 1 meter = 3.3 feetWEIGHTS & MEASURES 1 meter = 1.1 yards 1 pound = 0.45 kilogram 1 gallon = 0.004 cubic meter 1 ounce = 28 grams 1 quart = .95 liters 1 gram = 0.035 ounces 1 mile = 1.6 kilometers 1 yard = 0.9 meterLIQUID MEASURE inch = 25 millimeters foot = 0.3 meter (approximate) COMMON DISTANCE





FER 9 1980 COLLE CTORS: T. Plowmen, CT. Davidse, N.A. Rosa, C.S. Rosario and M.R. dos' Santos. Continued BRAZIL! Estado Para, Municipio de Conceição do Araquaia. Range of low hills 20 km. west of Re-Reference denção, near Corrêgo São João and tronca-Reference Monto Santa Teresa. Alt 350-620 m. 9 Feb. 1980, Approx. 803'S, 50°10'W. 8600. Dioscorea Dioscoreac.
(9) Twining vine in openarea in forest. Perianth dark reddish brown. 8601. Apuleia mollaris Spruce Legum.
(11) Tree 18 m. tall x 40 cm.
Wood diam. at base of mountain
foto in open forest, Let. Rosa 1980. 8602, Rudgea Rubiac (11) forest. Fruits green. 8603. Aspidosperma Apocyn.
(12) Tred 10 m. +211 × 15 cm.
diam. Fruits. brown. growing
wood in open forest of base of hill.

FEB 9 1980 P. STELLS (L.) KUIJT COMB. I NED (KUIJT 1994) 8604. Phthirusa retroflexa (R+P.) Kuijthoranth. (!) Hemiparasite in Anadenanthura peregrida. Fruits Olange tot. Kuijt 1981. 8605, ROLLINIA EXSUCCA (DC. EX DUNAL) A.DC. ANNONOC. (11) Tree 12 m. tall X 15 cm.
diam. at base of hill in
forest. Fruits green DET. PJ.M. MAAS, 1998 8606. Clavija MACROPHYLLA (LINKEXR. ESGOPMESTAC. (12) East unbranched Shrub in open flat forest Flowers oranges 8607. Matayba Sapindac.
(11) Tree 6 in tall x 30 cm. diam.
growing in open forest at base of hills Flowers white. 8608. Cedrela fissalis Vell. Meliac.
(4) Tree 16 m tall x 20 cm. diam-Fruits brown. Let. N. A. Rosa 1980. 8609. Polypodium decumannum Willd. fern 17) On top of hill on vocky out. Crop-Fern I m. tall. det. Michet + Atkhovtra 1981.

FEB 9 1980 8610. Physocalymma scaberrina P.hl. (5) Pree 15 m. tall XIIS cm. 8611. PARMOTRENA TINCTORUM (NYL.) HALE LICHENS
(5) Lop of hill. 8612. Tuidium schistocolyx (C.M.) Mit. Musci (11) 14055 on bark of large live tree trunk in forest dt. Steere 1982. 10 Feb 1980 FEB 10 1980 8613. Taccarum CRASSISPATHUM E.G. CONCALVES (7) Terrestrial avoid to 80 cm fall: Tuber subglisbose, white withing without, Petiole shing with mottled brown ent: Atenunder and white snahe-like pattern. Sterile, Occasional on rocky hillsides. (11) heverwort or gravelly road bank in frient, 8614. 8615. Cucurbita moschotz (12m.) Poir.
[12) Trailing vine cultivated in cleaned field, Flowers Leep yellow-

FFB 1 0 1980 Orange. Fruits globose to ellip : soid to 30 cm. diameter. h.v. albólboda 8616 Dracontium POLYPHYLLUML, Aracel Terrestrial hero to 2 m tall occasional in forest. Leaves ternete, which divided Petrole Scabrous With Small "spines", dull, inottled light, lur SEL, Al. and dark brown in Inskelike photos in cuer. pattern Tuber hemisperval or top shaped, creamy ellow within aFR wits white, exposed part brown. * Forming small pink tubercles on upper surface. 8617 Erythroxy/um subracemosum Erythice.
(9) Shrub 2.5 m. tall at eage of gravitie roch outcrop in forest. t Ruits pole green. 8618. Erythroxylum & off Erufum Car. Erythrox. (4) Shrub 4m. fall in open flat fotos "compina area in corrado.

pet. T. Plowman July sale green berlath,

beneath. 8619. Mabea paniculata Benth. Euphorb. diam. Sparse white (atex. + lowers cream. det. M.J. Huft 1864. Orchid. Drohid on large boulder Truit green. 8621. Cariniana rubra Gordner ex Miers Lecythidac. separate fruits 3 separate 8622. Alibertia edulis (L.C. Rich.) A.C. Rich. Rubiac (11) Shrub 2 m tall in steat.

gravelly glade in lowland forest.

truits Shin light areen.

set. Kirkbride 1981. 8623. Mandevilla scabra (R. + S.) K-Schum. Apocyn. (4) Twining vine in open gravelly glade in forest, Corolla tube white into h

at best tokes yellow let. Leeuwenberg 182.

(12) Thrub 2.5 m. on roch outcrop
in forest. Fruits light green. (8) Twining vine on moist rock outgreen above, Silvery beneath. Howers reddul Wolet, take deeper within Anther white: 8626, Moutabez EXCORIATA MART. Polygolac. (5) Sprout from woody trand 1.5 m. tall in capoerra. (DET. J. J. WURDACKTIGET) globase. 8627 CHIOCOCCA SP. VEL AFF. C. PUBESCENS H. B. EX R.+S. (8) Shrub 10 m. Fraits white. 8628. Banara guiznensis Aubl. Flacourtis. (11) tree 4 m + 511 x 5 cm diam. 8629. Colliendre perviflore Benth. Lequinin. (11) Shrub In. tall in gravelly moist glade in low forest. Flowers dark carmine red det Barneby 1981.

8630, Piper graciliramo sum Yunker Piperac. Spikes erect. Beechul in forest. dt. R. Callejas 1981. 8631. Mabea Euphorbiac.
(4) Treelet 2 m. +211 in forcet at base of hill. Flowers creamy white Leaves derk green above, greyish green beneath. ver scabrior Doell. 8632 Ichnanthus colvectens (News) Gram. (2). Along road through forest, det. Devider 1981. 8633. Tripsacum australe Cutler + Anderson Coram. (6) On rocky hillside Shade of Quadua along stream, Plant 2 m toll Anthers light yellow Stigmas dark purple, let. G. Davidse 184. 8634. Hemicarpha micrantha Necs Cyperaci F(7) In wet are 2 on rock out crop. det. T. Koyama 1981 8635, ADIANTUM LATIFOLIUM LAM. fern.
(11) Terrestrial fern in shade of

FOREST, DET. MICKEL & ATEHORTUA 1981

FIB 1 0 1980 8636. Utricularia oliverana Ster. Lentibularias (12) Herb in seepage area of rock A>K out Crop. Covollà pale yellow uith danker yellow prector guide. 8637. Utricularia hispida Lam. Lentibulariac. (6) Herbin seepige red of rock outerop. Corolla deep yellow, orange yellow at throat. 8638. Utricularia pusilla 16hl Lentibulariar. (2) Herb in see page area of roll out crop, Corolla yellow, 8639. Ischnosiphon GRACILIS (RUDGE) Marantac. (7) Scandent liana 2.5 m Bracts light green, DET. L. ANDERSSON APB 3640. Ichnanthus pallens Grain.
(2) Herb decumbent at boxe in lowland forest. 8641. Eulophia Orchid. Perianth light green, lip whitish with Light green Veins in lower 3/4,

FEB 1 0 1980

Pollinia gellow. det. E.A. Christenson 1983 (10) On Edge of rock outcrop. Strub for 2.5 m. tall Frent brownish 8643. Epiphyte in lowland forest.
(2) Perianth Pale green, lip greenish white, 864. Trichilià pallida Sw. Meliac. (5) Understory tree 3 m. tall. Flowers pale green, Mt. Rennington 1782. 8645. Streptogyna americana C. Hubbard

(II) grass in Shade of lowland

forest. 8646, Strepto chaeta Spicata Schroo. (Framin (DET. G. DAVIDSE, 1980) (O) Joseph In Shade of lowland

8647. Panicum of planotis Trin. Gram.
(16) Edge of forest along road forming
sprawling colony. Let. G. Davidse 1982.

8648. Setaria vulpiseta (Lam.) R. + S. Gram. (8) Edge of forest along road.

8649. Habenaria Orchidar Orchidar

(10) Terrestrial orchidin Shedi of rock out crop with Colitary tuber. Sepols light green. Corolla whitish Column whitish det. E.A. Christonson 1983 var. brizoi des (ft. H:l. + Mog.) Steps. 8650. Polygalar. (2) Frecherb in rock outerop.
Persenth pale pink, wundech 1981. 865 | Champesyce hyssopifolia (L.) Smill Euphorbiac. White Stex: Flowers green. Stem and 1984. Leaves Tedd Wh. Not. M. J. Haft 1984. (will see R. s.) M. Arg. Rubiac (13) Understory Shrub to Im. tall in low shed forest Bracks white with Pinkish tinge or sometimes greenish. Fruit green. Let. Kirkheide 1981. 8653, Polypodium PERCUSSUM CAN. Pern

(8) Fern climbing on tree trunk

Un lowland forest.

8654. Marsdenia sp.

(3) Prostrate vme 3 m. long on rock out crop. Latex white.

8655 Psychotrio prunifolia (HBK.) Rubiac.

(11) Linderstory Shrub in lowland forest. Breets derk green in

apical half, yellowish in basal half; fruit green, colyx remain-ing yellowish in fruit 1981.

8656, Bactris pectinata Mart velage. Palmae

(7 sots) tall growing along small brook in forest. Fruits greeni
m. lolinforms (Hocket.) Chase det. Figueires
8657. Mesosetum longifolium Swallen Gram.
(6) Grass in Moist gravelly glade.
in lowland forest det Davidse 1981.

8658. Axonopus CANESCENS (NEES) PILGER Gram.
(6) grass in moist gravelly gravely glade in lowland forest.

8659 POLYGALA ADENOPHORA DC. SUBVAR. Polygolac. (10) Herb in moist gravelly glade in low forest: t-lowers red violet. 8660, Bulbostylis conifera C.B. Clarke Cyperac. F (4) Herb in moist gravelly glade in Ny lowland forest det. T. Koyama 1981 8661. Habenaria Orchide Corchidec.
(6.) Terrestrial orchide bearing
Soveral tubers in moist gravelly glade in lowland forest. green, column dark purple.

Art. E.A. Christenson 1983 prople. 8662. Phychospora trichochaeta c.B. Cyperac. (11) Sedge in Moist gravelty glade F in lowland forest. Spikelets yellowish brown det. T. Koyama 1981 F (11) Sedge in moist gravelly glade in lowland forest. Spikes brown.

dut. g. Davidse 1980 8664: Scleria pusilla Pilger Cyperac. F(10) Sedge in Moist gravelly let.

Terrestrial orchid with solitary tuber in moist gravelly glade in lowland forest. Sepals green.

Corolla lemon yellow. 8666. 8667. Epiphytic orchid on treetrunk at edge of gravelly glade in forest Perianth green, lip white. 8668. Symplocos

(II) Tree 8 m. tall x 10 cm. diam
in lowland forest. Corolla and fila. Mevits white. 8669. Mimosa floribunda Willd. Leguminos (9) Substituto 1.5 m. in moist
gravely glade in forest. Filaments
cormine pink 311 theres white. 8670. Dioscore à aconthogyné Rusby Dioscoreac.
(6) Prickly vine among Shrubs in weedy cleared field. Flowers

(10) LEdge of moist gravelly glade.

FEB 1 0 1980 greenish white. 8671. Bidens pilosa L. Compositar (6) Herb in weedy cleared field. Florets yellow. det. Robinson 1981. 8672. EMILIA FOSBERGII NICOLSON Composital (10) Herb in weed, cultivated ground. Flowers deep carmine red. White 12 ax. (DET. H. ROBINSON 1981) 8673. Kenealmia alpinia (Rottle) Mass Zingiberas (11) Herb 2.5 m. tall in ravine in hillside forest, with 5-6 Stems. Peduncle deep pink. Fruits red, black et maturity
det. P. J. m. Mess 1983 8674. Hemionitis rufo (L.) Sw. Fern (10) Terrestrial fern in hillside forest on side of gully det. midelt Allhortue 1811. 8675. Dryopteris potula (Sw.) lind. Fern.
(8) Epiphyte on trunk of
gracero polm in hills I de
fotos: forest det. Michel + Atehor tua 1981.

8676. Paullinia Sapindac. Fruits red at maturity. 8677 Emilia sonchi folio (L.) DC. ex Wright Composit (5) Herb in weedy cultivated growth, Florets lilac. White latex. det. H. Robinson 1981. Irwin + Bernely

8678. (assia: Senna silvestris (Vell.) Leguminos. (11) treelet 6 m. tall in edge of forest in cultivated ground. Byx deep yellow. Pet als
yellow with red claw. Let Bernily. 8679. Malpigha. (5) (Twining woody vine in doep wellow. deep yellow. 8680. Polygala CF. SPECTABILIS DC. Polygalac (12) Pubshrub to 40 cm. tall on roadside in edge of thicket. (alyx reddish green. Wings White at base, Bterally redviolet spically green; tubular petal's white, yellow at apex. Roots with methyl salicylate odor. FEB 1 0 1980

along trail. Trunk corky, strongly foto ridged longitudinally. Leaver pole green dull beneath Sterile. WOOD Uw 8682 Porophyllum Composita (5) Tall herb 1.5 m. tall in. small forest clearing on hill-5 i d.e. Involvere green Florets yellow-ochre. 1 1 1980 / Feb 1980 (11) growing on vertical rock
face in forest. The Ilux bright

green. 8684. Kylophragma sp.

(22) High Climbing liana. Fruits

11 sets woody, brown det A. gentry 1981. 8685 Rhynchospora Cephalotis Vahl

(11) Herb in forest in low moist

F gravelly area. det. 9. Davidse 1980

8681, Erythroxylum daphnites Mart. Erythrox.

Shoub 2.5 m. tall in forest

8686. Annonze. (10) Periznth brownish without greenish within . Stamens dull Yellow orange, Putil green. Stree 10 m. fall x 15 cm. diam. in hillside forest. 8687.
(4) Sep White. Fruit yellow. 8688. Calyptrocarya glomerulata Urb.
(11) Un marshy area along streamFlet in hill side I forest, dut. g. Davidse 1980 8689. Selaginella Selaginellac.
(10) In shade of hillside forest on boulder. Stems erect. 8690. Helicteres (1) side forest. m. tally in shady hill-8691. Abuta crandiforia (MART.) Munisperm (11) Scandent shrub tall in hillside forest, Buds green; (DET. B.A. KRUKOFF, 1981)

FEB 1 1 1980

8692, Drymonia Gesnerisc (8) Epiphytic vine in old polm Corolla creamy white, upper lip with red spots. I wish Liliac.

(9) Climbing vine on tree trunk growth. Fruit dark green. 8694-Luehea Tiliac. (8) Tree 10 m tall x 15 cm, dism. in hillside Forest. Fruit green. Leaves dul derk green Hove, silvery green beneath with rusty brown veins. 8695. Brachiaria brizantha (Hochst. (T/am, (10) Invader in open cutover secondary growth. 8696. Mesosetum cayennense Stend Ciram. (8) gress in low wet grovelly open area by rock outerop. Hairs on spikelets dark purple det. Devidse 1981.

8697. CHRYSOPHYLLUM SPARSIFLORUM Sapotac.
(14) LOWIZING FOREST along road. Tree 10 m. fall x 10 cm. dism. Latex Whiter Fruits green.
DET. T. PENDINGTON 1992 8698 Cordia polycephala (Lam.) I. M. Johnst Boraginac (11) Treelet 4 m. tall in low-lying forest margin, Flowers cream. dt. J. Kellunki 1984. 8699. POSOQUERIA SP. VELAFF. P. LATIFOLIA (RUDGE) R.+S. (11) Tree 10 m. tall x 15 cm. in lowlying forest, Fruits
globose, green, DET. J. KIRKBRIDGE 1981 8700, Allophyllus Sapindac.
(11) Frequent shrub to 4 m.
tall in forest margin. 8701, Heliconia HIRSUTA L.A. MUSac. thickets. Bracks red-crange red towards tip. Corolla orange green at tip, ovary Fuffi erect distictions.

FEB 1 1 1980,

8702, Spondias

(7) Tree 15 M. tall x 30 cm.

8703 Aspidosperma 2/6 um (VShI) R. Ben. ex Pichor Apocyn. (11) Tree 12 m. tall x 30 cm. diam. Leaves dark shing green above, dull pale green beneath, Fruits or 1982. 8704. Rubiac.
(9) Erect herb in moist marshy open gravelly area near rock out crop. Corolla pure White, fugo cious. (3) Small rosette in shallow run-ning seep on top of granitic rock out crop. 8705. Erro card? 8706. Utricularia cucullata St. Hillerti bular (2) growing in shallow seep on top of flot granitic roch outcrop Let. P. Taylor in vich organic soil. Corolla red violet, white patch at

woop. diam. Fruits deep yellow

at Maturity: Frequent.

base of lip with tinge on yellow. 8707, Utriculario lloydii Merl. Lentibubr, (3) growing in shallow seep on top of flat granitic rock out-Crop in rich organic soil. Corolla yellow throughout. Stems red, det. P. Taylor 1981. 8708. Burmannia capitata (Walt ex (Trel) Burmanniac. Delicate herb in moist gravelly (2.) area next to flet rock out! 1-9 U fotos Crop, Zmong sedges. Flowers Cream. det. P. J. M. Mods 1981. 8709 Burmannia flava Mart. Burmanniac. (7) Delicate herb on moist Sotos gravelly area next to flat noch (A) -> U out crop among sedges. Overy yellow. (D7K Perianth green is he yellow, ut) P.J.M. 1981. 8710. Polygala galioides Poir Polygalac. (4) Delikate herb in seepage area on Flowers cream. Let. wander 1951. 8711 Caledium bicolor Ait. Arac. (4) Terrestrial around at edge of moist rock outcrop in

FEB 1 1 1980 forest. Lezves shing dark green above, not variegated, pale glaucous green beneath. Petrolo pole brown with faint mottling. Tuber flattered, within det. T. creat 1982! yellow 8712, Enthroxylum daphnites mort. Enthrox Spedlings

(12) Treelet 3 in tall in WOOD- lowlying forest next to orshitle rock out grop. WOOD-UW Man Leaves semi shing dark
MADW MONTHS green above; dull light green beneath. Strile 8713. Ocimum micronthum Willd. Labiat.

(8) Strongly aromatic hert along open roadside in Cleared area. Calyx pale green, Flowers pale Violet. green, Flowers pale Violet. Erythrox. 8714 Enthroxy lum leptoneurum O.E. Schul Det. I. Plowers Margin along road in low-(5) Shrow 1.5 m. tall in forest lying forest on gravelly soil.

Leaved dull medium green above, shiny light green

beneath, lightly bullete and Strongly undalate at margin. 8715 Phyllonthus stipulatus (Rof.) Webster Euphorbiac.
(8) Velicati herb in seepage
area on open flat rock out
crop. det. M.J. Huft 184. 8716. Centrum Solanac. (8) Shrub 1.5 m tall with long . viraste branches, arising hear base growing it egge of thicket . along road Fruits green. 8717. Oryza sativa L. LOET. G. DAVIDSE, Gram.
(11) Costivated grass in hilly fotos gravelly fields. 8718 RIENCOURTIA ANGUSTIFOLIA GARDN. Compositoe (13). Erect herb in seep sige on gravelly soil, Florets white, Strongly aromatic, resembling Carrot, (DET. H. ROBINSON 1981)

8719. Austonia lindmannii (Malma) thehne Apacyn. Sap in order cut-over alca. Corolla tube green yellow, lobes dull red, green at best, thickening at throat yellow. Anthers white = Rootstalk thickened, let. A.J.M. Leeuwenberg 1/81 8720, Cayaponia racemosa (Mill.) Cogn. Cucurbit. (9) Herbaceous climbing vine in open weedy cleared area. Staminate flowers: corolla green upper half and margin of lobes white. Pistillate. flowers: corolla same, stigma white. Fruit green-(1) Herb in open weedy Cleared area. Coro Ma palo yellow, brownish basally. 8722. Maxillaria ALBA (W. J. HOOK.) LINDE Orchidac. (12) Epiphytic in hillside forest, Perianthe completely white.

Let . E. A. Christenson 1983, 1999

(3-) Epiphytic orchid in hillside Orchidace 20 forest. Per 12nth yellowish green with 2 few dark red dots along margin. Lip white with scattered dark red dots, lip turning yellow with age (NES (NES) (Tam.) Swallen (Der. O. Davidse, 1980)

(b) Scandent grass among tall herbs at edge of moist marshy area in partial shade. 8725. Crotalaria Legumin. Flowers yellow. 8776. Luchez CANDICANS MART. Tiliac. (11) Ihrub in forest margin at edge of marshy area, Fruits green, leaves dall green above Tuhitish beneath, DET. LJ. DORR A98(N) 8777 TOCOYENA SP. VEL AFF. T. FOETIDA P. E. EX CHAR. Tree 15 m. tallix 10 cm. dismeter. Fruit woody! DET. J. KIRKBRIDE 1981 T. FORMOSA (CHAM. & SCHLECHT.) SCHUM. SSP. FORMOSA

DET. A. L. PRADO 1984

8728. Randia Rubiac.
(12) Shrub 2 m. tall in forest
understory. Fruits green,
yellow at maturity. 8729, EUGENIA Myrtaciae
(11) Tree 5 m. tall x8 cm diameter. Growing along Fruits green, (DET. L. LANDRUM, 1981) 8730 PSIDIUM Myrtac.
(IV) Tree IS m. tell x 30 cm
(wood) dismeter Fruit green' 8731. Miconia MINUTIFLORA (BONA. Melastom. (10) Tree 6 m. tall. Flowers White - In low lying forest Margin (DET. J.J. WURDACK, 1981) 8732. Mayaca fluviatilis Aubl. Mayacac. (13) Submerged met-forming aguatic herb in small stream te (A) 7K running over granitic rock foto. out crop. Flowers white Fruit & Dle green: let. A. Lourteig 1981.

FEB 1 2 1980 (12 Feb 1986) 8733, Lichen. Vellozia stem in low moist vochej outerop. 8734 AMAIONA GUIANENSIS AUBL. Rubize. (12) Tree 8 m toll x 10 cm. diem. in socondary forest margin: Fruits red purple DET. J. KIRKBRIDE 1981 8735. Cassia Legumin.
(11) High climbing lians with bright yellow wood. Buds deep yellow. Fruits dirty yellow. 8736. Bauhinia ungulata L. Legum. (12). Shrub 1.5 m. tall. Stamens. White. J. grimes 1981. 8737. Bauhinia aculeata L. Legum.
(11) Armed shrub to 3 m, tall in roadside thickets. Petals and Stamens white, Frequent. 8738. Byttneria catalpifolia Jacq. Sterculiza (11) High climbing liana, in forest foto margin. Flowers white.

8739. Mendoncia globra (P. + E.) Nees Acanthac (11) Liana 15 m. in treetops. F Corolla creamy white, lower love yellowish, lower, three petals with dark purple veins at throat, det. D. Wasshausen 1/83 8740, Hanelia PATENS JACQ. VAR. GLABRA DERST. (11) Shrub 2 m. tall in under-Story of forest. Fruits dull overage, purple black at maturity. DET. J. KIRKBRIDE 1981 8741. Plukenetia penninervia Muell. Arg. Euphorb.
(10) Herbaceous vine in forest
edge. Fruits green,
Anacardiai 8742. Thyrsodium paraense Huber (11) Tree 16 mutall X 35 cm. circumference, Fruits green, det. n. A. Rosa 980. 8743 STYLOGYNE AMBIGUA (MART.) MEZ MYSSINGC (5) Shrub 4 m. in forest lunder-fory. Fruits green. (DET. J.J. PIPOLY 11981)

8744. Hyptis atrorubens Poit, Labratae (8.) Sprawling prostrate weed on barren Hoadside. Corolla white. dut. R.M. Harley 1884. 8745. Adientum oyapokense Jenman fern spores streambanh in Athorn for Rane. 8746. Adiantiopsis radiata (L.) Fee fern (14) Delicate fern in forest spries near small stream, let Miles 81. 8747. Clemetis BONARIENSIS JUSS. Ranunculac. (10) High climbing Vine in forest margin along road, Buds White, DET. J. RAMOS, 1992 8748. (ISSUS Sicyoides L. A. LOMBARDY 1993]
(4) Climbing Vine in forest margin , along road. Petals cream: Fredit black at maturity.

det. J. Kallunki 1981 8749, Lud Wigid octoralvis (Jeg.) Reven Onagrac (6) Renk herb 2 m. tall in mershy open roadside, Petals yellow.

Let Roven 1981.

FEB 1 2 1980 8750, Commelina benghalensis L. Commelinac us Sprawling herb in thicket on Steep rod bank. Flowers blue. det-R-Faden 1981. 8751. Hyptis surveolens (L.) Poit. Labiatal (9) fromatic herb to 2 in tall Flowers pale blue violet. Flowers pale blue violet. 8752. Clidemia HIRTA (L.) D. DON Melastomat. (11) Shrub 2 m. tall in forest margin along stream. Fruits dark blue - do let at maturity. 8753 LINDERNIA CRUSTACEA (L.) SCrophulariac (8) Prostrate herb in standing Shallow water on open road -Side. Flowers pole blue -VIOLET DET. KARLA. VINCENT 1989 8754, Theobroma speciosum Spreng Sterculiac. (5) Small tree 6 in fall x 6 cm separate diam. with leaves all near fruit top of tree forming broad flat crown. Leaves dark shiny green above, pale

grey green beneath. Buds green. Old fruits brown, 8 cm. long, broadly ellipsoids det. P. Matekaitis 1982

8755. Cissampelos tropacolifolià DC.

(12) Climbing vine in open roadside in thicket Pistillate flowers creamy white. Fruits pale green, ffr+8fl. but some lvs. of snother species. Det. R. Borneby 1981.

8756. Ludwigia hyssopifolio (G. Don) Exell Onagrac. (8) Coarse herb 1.5 m. tall in marshy open roadside. Petals yellow. Ovary red. Lt.P. Roven 1881.

8757, ADIANTUM LATIFOLIUM LAM. fern (11) Terrestrial fern with creep ing rhizome in low rocky forest, DET. MICKEL & ATEHORTUA 1981

8758. Spigelia loganiac.
(2) Herb in forest along stream.
Flowers white.

8758A, Schizolobium 2º growth tree

8759. Siparuna Monimiac. (6) Shrub 3 m. tall in edge of forest. Aromatic. Ploders creamy white. 8760. Cordia multispicato Cham. Boraginac (11) Treelet 4 m, to !! in forest margin along road; Flowers Cream, Fruit red at maturity-8761. Spilanthes alba L'Her. Composit. Avoination herb in open roadside. Let. H. Robinson 1981. 8762 Ipomoes pinnoto (onvolva) (12) aggressive herbaceous vine in roadside thicket. Flowers bright red. 8763 Gurania Zuminata Cogn. Cucurbit. (12) Herboreous vine on roadside in torest margin. Flowers lemon yellow. Fruit Let. Teffrey 1906

8764 Mandevilla scalia (R.+s.) K. Schum. Apocynoc. (11) High climbing lians in forest, Latex white Fruit green, but Leeuwenberg 1982. 8765. Aristolochia Aristolochiac. (1) Roadside climber Corolla limb mottled velvety dark purple, greenish white. 8766, Brachiaria Huhidicola (Rende) (Tramin.
(b) Forming Colonico on weldy rosdside, 8767. Pteris propingus Agherd. Fern.
(3) Terrestrial ternste fern.
in shade of forest along
Stream, det. Michel 1781. 8768. Setaria geniculata (lan.) BEAUV. Gram.
(8) Bristles youlowish.)

Bristles youlowish. 8769. Coccolobo coronata Jag. vel ef. Polygonaci. Fruit red. det. R.A. Howard 1884 C. CORONATA JACQ. DET. J. BRANDBYCE 1992

8770. Phyllanthus stipulatus (Raf.) webser Euphorbiac.
(9) standing water on open
road side, det. M. J. Huft 1/84. 8771. Nectandra cuspidata Nees Laurac. (11) Tree 15 m. tall x 20 cm. diam, Flowers creamy, white. In for est 1985. In. 8772. Paspalum DECUMBENS SW. (Tram. (12) Weedy road Side in Shade of forest margin, 8773. Calathea Marantac.
(6) Herb in shade of forest along stream. Brocks memviolet. Flowers pure white to 8774. Heliconia psitzcorum L.f. Musceae (5) Herb ca. Im. tall in padside thickets. Bracts red, orange toward base. Perianth orange except for

Anderson al side at a pex. Overy orange

FEB 1 3 1980 13 Feb 1979] 8775 Piper graciliramosum YunckerPiperae. (12) Climbing vine with holdfast F roots, to 1.5 m. tall on slender teetrunks in rocky forest. Spikes green. Young slants

Flowering spikes yellow. Fruiting occurring as rosulate prostrate trent: on forest floor, det. R. Callejas 1981

8776, Bertiere guianensis Aubl. Rubiaco (12) - Shrub 2.5 m. tall in thicket in forest Mergin. Flowers while Fruit green det. Kirkbride 1981.

8777. Dioscores Dioscoresc (4) Climbing vine, Fruit green to brown. On top of rocky mountain.

8778. Paspalum malacophyllum Trin.
(13): Grass on steep open rocky
mountain to p. det. G. Davidse 1983

8779. Arrabidaez platyphylla DC. det. genty 1981. Bignonia (11) High climbing lians on open rock outcrop on steep hilltop, Colyx pink, Corolla deep rose

FEB 1 3 1980

pink. 8780, FARAMEA Rubiac. (11) Tree 10 m. fall x 30 cm. diam. near summit of steep rocky hill. Fruits green! 8781. Magania publicens St. Hil. Sapindac. Tree 12 m. tall X 15 cm. (7) sep fruit diam. growing at base of roch outcrop on steep hill Side Fruits brown, sub globose, to 9 cm dismeter 17 cm long, det. P. Acevedo 1985. 8782 Emmotum nifens (Benth.) Mers Ica cinac (12) Tree 12 in tall x 20 cm diem. among boulders on hilltop- Leaves shiny, dark green above, silvery white beneath. Buds cream, det. R.A. Howard 1984. 8783. Spondias Anacardiae
(11) Tree 18 me tall x 45 cm wood diem, growing among boulders on top of mountain. Fruits yellow orange.

8784. Gouania Inpulsides (L.) Urban Rhamnac. (7) Twining vine in crack in roch outcrop on mountain top. Buds tawny Let. M.C. Johnston 981.
8785. Orchid Orchidac (1) Orchid on exposed rocks, Personth green with brownish tinge. Lip and lobes whitish. 8786. Euphorbia sciadophylla Boiss. Euphorbiac.
(9) Herb on rocks in forest in steep hillside. White latex. Fruits green. det. M. J. Huft 184. 8787 Spermacese:
(11) Herb in Moist depression
on exposed rock out crop. Corolla. white. 8788. Avanthacorus angustifolius (Su.) Anderw. Fern. in Steep hillside, Let. Michel.

8789. Anemia AFF. OBLONGIFOLIA (CAN) SW. ZZEZC.
(12) Small pilose fern on moist rock
faces in forest on steep hillside.

FEB 1 3 1980

8790 Aue mid PASTINACARIA MORITZ Chizalac.
(10) Slender fern on Moist rock
faces in forest on Steep hillSide, DET. MICKEL & ATEHORTUA 1981

8791. Ficus guianensis Desv. in Ham. Moraceae (14) Tree 6 m. fall x 12 cm diam. Latex white. Growing on rock outcrop. Fruit pink with red dots.

(7) Orchidoc.

(7) Orchidoc on vertical cliff
face in Shade, exposure,
Perianth light green, sepals
with irregular dark purple
duts on back. Lip and column
white-Lip with dark yellow
base. Flowers fragrant,

8793. Strychnos PARVIFOLIA A.DC. Loganiac.
(11) Liana in hillside forest.

Branches Spiny, Frait

green, (DET. B.A. KRUKOFF, 1981)

8794. Trigonia NIVEA COMB. VAR. Trigoniac (7) Woody vine in crack in exposed rock out crop on moun 8795. Ichthyothera davidsei H. Robinson Composit. (4) Herb 0.8 m. tall in moist crack in exposed rock out Crop on muntain top. Florets

8796, Contarea hexandro (Jacq.) K. Schum. Rubizco (11). Tree 6 m. tell in crack in exposed rock out crop on mountain top. Fruits light green. Let. B. Boon 1961.

white PARATYPE

8797. Bomarea . Amaryllidac. (2) Scandent vine among boulders on steep hillside. TRuits STAR Ti bouching Posonanthera Melaston.

16) Treelet 3 mix 15 cm dem

wood among boulders on rock

outeropon Steep hullside. Fruits green (DET. J.J. WURDACK, 1981) 8799. Anemopægme pobstii A. Gentry Bignon.
(2) Woody vine among houlders on steep rocky hillside.
Fruit green, det. A. Gentry 182. 8500. Mimosa pusilliceps Barneby Legum. (10). Jubshrub in seepage area on tock out crop, Flowers rose, ut. R. Barneby 1884. 8801, Lantana aristata (Schau.) Brig. Verbenac (8) Scrembling herb in moist 1. ith yellow center, dt. Moldente 48) 8802. <u>Sclerolobium</u> Legumin. (10). Tree 8 m. tall x 15 cm diam. among boulders on Steep eliff on hilltop. Fruits 8803. Cissus simsiana Roem & Schult. Vitaceae (11) Climbing vine semi-woody

It base in hillside forest Imma ture fruit red, disture fruit purplish black, let. T. Plowman 1884. 8804. Banisteriopsis muricata (Gu.) Cuatr. Malpighião (2) Petals white with pink there, Lilaments white, anthers yellow. Leaves dull green above, Silvery sheen beneath. Liana in hillside forest. 8805 Magonia pubescens St. Hil. Sapindac. (343) Tree & m. tall x 10 cm. dism. Sporte Fruit brown Lt. P. Acevedo 1/85. 8806.
(1) Jubshrub Im tall. Retals

red: On hilltop in open

forest.

8807. Digitaria insularis (Li) Hez ex (100)

Grass in open distribled (1480)

ground. 8808. Himstenthus erticulatus (Vahl) Woods Apocynac.

(6) Tree 6 m. tall in crock of large rock butcrop on moun

tain top. Flowers white fragrant let. P. Revenua 1961. 8809. Trachypogon gram, (3) grass in moist glade on gravelly soil, 8810. Cestrum LATIFOLIUM LAMI Solanze. (11) Shrub 2.5 m. tall in weedy open thicket. Flow ers ereamy white Imma. ture fruits violet, black at maturity, SET. M. NEE. 2000 8811. Amaranthus SPINOSUS L. Amaranth. (10) Coarse spiny herb to 2 m. tall in open pastyre, Stems bright pinh, Flowers green. 8812. Capsicum Soloner. (6) Cultivated herb 2 m tall in houseyard. Pedicel erect, flowers and fruits nodding, truits light green with dark purple blush.

8813. Bromelia villosa Mez relatt. Bromeliac (8) Armed bromeliad on open exposed rock outcrop on Steep 3 sparet hi 1/side. Leaves on flowering inflorers. plants turning bright red. Inflores cence broad and flat, at ground level, yellowish brown, covered with 1-2 cm thick byer of mucilage. Flowers pale pink. L. B. Smith 1981. 8814. Quazuma ulmifolia Lam. Sterculiac. Tree 8 m. fall x 12 cm. (9) dizin along boulders on hilltop. I'm ture fruit green, det. P. Matekaitis 1982 8815. Anemopæegma pabstii A. gentry Bignoniac. boulders in open rock outcrop in mountain top. Fruits! green: det. Algentry 1981. 8816 Octoblephorum albidum Hedw. Musci (11), Moss on worst boulder in hillside forest. set-Steere 1981.

FEB 1 3 1980

8817 HETERODERMIA SPECIOSA (WULF.) TREW / Chews (7) Blush green lichen on granitie rocks in hilltop 8818 Stereophyllum obtusum Mitt. Musci. (11) Moss on large granitic boulder in hilltop forest; 8819. Pospalum gardneri Gram. (1) Grass in open moist gravelly glade in forest. FEB 1 4 1980/14 Feb 1980/ 8820. Adiontum GLAUCESCENS KL. FEVA. (10) Fern with herizon ! I chizones DET. MICKEL & ATEHORTUA 1981 Trequent. 8821. Maranta orbiculatà Pers. Marantac. Frequent herb in open maist (11)Clearings on rocky hillside. Lus. Flan Andersson pole green, lightly pruinose be neath. Bracks and flowers ATOK. bright orange, Flowers visited by butterflus. foto with 8443.

8822, Jacaratia spinosa (Aubl.) DC. Caricacioe
(3) Tree 11 m tall x 33 cm.

diam. Trunk and branches
with short sharp spines. Leaves
shing dark green above, pale
grey-green beneath. Fruit

orange. In rocky forest,

at. V. M. Badillo 1982.

8823. Poupartia Anacardiace
(10) Tree 18 m. tall x 40 cm. diam.
in hillside forest. Fruit
subglobose, green.

8824. Ficus maxima P. Miller Moraceae (12) Tree Zo m. tall x 90 cm. diam. in forest at base of hill. Laber cream, abundant, caustig. Fruits light green.

8825.
(2) Fungus on dead tree trunk. Deep rose pink.

826. Cyperus sphacelatus Presl Cyperac, (3) Roadside weed, FEB 1 4 1980

8827 Paspalum Conjugatum Berg. (Tramin, (7) Stoloniferous roadside Weed.

8828. Cyperus Mariscus flavus Vahl Cyperac.

Ny (4) Roadside Weed, dot. T. Koyama 1981

8829. Cyperus diffusus Vahl Cyperac.

8829. Cyperus diffusus Vahl Cyperac.
(11) Proadside weed.

Brzgil: Edo. Pars': Mun. Sentens do Araguaia. Fezenda Codespar. Ros d to Rio Douroldo, 18 Feb 1980-

8829A. g. Bensterispsis lucide Melpigh.

slides only

W. R. Anderson UofM Herbarium Nofth Univ. Bldg. Ann Arbor, Mich. 48109



Dr. Timothy Plowman
Botany Dept.
Field Museum
Roosevelt Road at Lake Shore Drive
Chicago, Illinois 60605

How thanks for the mind nice pigh pix. The species, says Bron Gats, is most likely Banesteriogesis lucida. The

Bron Gats, is most likely Banesteriogesis lucida. The other possibility is B. published, which is similar and grows in the same area but usually has an unbranked infloressense.

Regards, Bill

Planmen et al. 8829A. Collectors: T. Plowman, G. Davidse, N.A.
FEB 181980 Rosa, C. S., Rosario and M. R. dos Santos. BRAZIL' Estado Para, Municipio Santana do Araquaia: 100 km South of Redenced on road (PAISO) to Berreiras dos Caucpos. Alt. 210 M. Trajazinho and Rio Inaja.

Approx. 8.45's, 5025'w. (18 Feb 1980,) 8830. Myrcia AFF. ROSTRATA DC. Myrtac, (11) Tree 10 m. tell x 10 cm diem with brown fissured exfolizting bark. Fruits shing black, 2romatic. In lowlying forest. 8831. Physalis angulata L. Solanac (10) Herb 2 m. fall in open Sandy clearing. Flowers pale yellow. Inflated calyx light dreen with dark purple vems. Berry dirty yellow, Sweet, edible N. V. gamapú! Let. M. Nee 1982. 8832. Geophila repens (L) I-M. Johnston Rubiac (3). Prostrate herb in lowlying forest. Buds white, det.

FEB 1 8 1980

(12) Tree 4 in fall in margin wood if lowlying forest. Flowers white, fragrant. 8834. Psychotria bahiensis Dc. Rubiac. (12) For Subshrub to Im. tall. Rachis dark red-purple. Fruits green turning pure white at meturity. Evequent in low lying forest det. Kirkbride 1981. 8835, Aniba Laurac.
(10) Tree 6 m. tall x 5 cm.
diam. in lowlying forest.
Fruits green. 8836. Licramnia Simarubac. (13) Tree 10 m. tall x 4 cm. In understory of low lying. 8837-Protium unifolioloto Burserac (11) Tree 7 m. tall x 10 cm. dism. in flooded forest. Fruits

8838, Passiflora Passifierac.
(H) Vine in roadside thicket. Fruite green, globo se, pruinose. 8839. Cathedra acuminata (Benth.) Miers Olacac. (6) Tree 15 m tall x 20 cm.
diam! in flooded forest, Fruits yellow, Let. H. Sleumen 1881. (8) _ Lianz among shrubs in open flooded forest. Buds white. 8841. GUETTARDA POHLIANA M. ARG. Rubiac. (11) forest. Fruits dark purple, separati fruit flesh sweet, white within, 8842 Esenbeckis pilocarpoides Kunth sp. pilocarpoides Rutac. F (11) Thrub 3 m tall in Cleaning margin in lowlying forest. Flowers green'sh yellow, Fruits green, Let. J. Kellunki 183

8843. Poupartis Anscerdias (9) Tree 10 m tall x 25 cm. diam. In low flooded forest. Fruits green. C. LUCIOULA BENTH. DET. J. BRANDBYGE 1992 8844 Coccoloba sagotii Lindau Holygonec (10) Liene 2 m. tall among Shrubs in open flooded forest. Fruits green at. R.A. Howard 1/84. 8845. Epidendrum Orchid. in open flooded forest. Fruitsgreen. 8846, Polypodium persicarii folium Schrad. tern (12) treeping epiphyte on tree trunk in low lying forest in 847. Coyaponia selysioides C. Jeff. Cucurbit. (14) Herbaceous vine forming thicket in open sandy dearing in lowlying forest. Fruits.
green. Jeffrey 181. (12) Herbaccous Vine Asclepiadac

In sandy

Clearing in lawlying forest. Howers green. Letex white

8849. Desmodium axillare (sw.) Dc. Legum (8) Prostrate running vine in. margin of lumber road in lowlying forest, flowers pink.

8850 Davilla Dilleniac (8) Liana in small tree in low flooded forest. Buds light green. Fruits dark green.

8851, Ceceria grandiflore Camb Flacourt. (11) Frequent Shrub to 3 m. tall in roadside thickets. Branches spreading. Buds + flowers creamy white, Leaves dark shiny green above, whitish dull green beneath,

8852. DIODIA OCIMIFOLIA (WILLD. EX R.O.S.) BREH. RUB. (10) Herb in upen weldy area along lumber road in low lying forest. Corolla white DET. J. KIRKBRIDE 1981

8853. Sloanea Elaeocarpac. (12) Tree 12 m. tall x 15 cm. dism. Fruit dull gren, turning dull orange at maturity.
In flooded lowlying forest,

8854. Phthirusa retroflexa Kuijt Loranthac. (10) Hemiparasite on rubia-ceous tree (#8869). Fruits P. STELIS (L.) KUIST ut J. Kuijt 1981. 8855 - Khynchospora comata Schuttes Cyperac. F (11) Forming large clumps in forest indrain det. T. Koyama 1981

8856 Monstera SUBPINNATA Aracoae (7) Climbing epithyte on tree trunk in low lying forest, 1988 Spadix dull deam, DET. T. CROAT 857. Epidendrum Orchidac. (12) Growing on wet rochs along creek. Perianth green Lip and column white. BARNEBY & KRUKOFF 8858 ORTHOHENE SCHOMBURGKII (MIERS) Menispermac.

(10) High climbing liand in edge of low lying forest along road.

Fruits black at maturity.

8859. Connèrec.
(2) Shrub'2.5 m. tell in flooded.
low lying forest along road.
Buds cream,

8860. Maranta? Marantac.
(15) Sprawling branched herb in green Petals translucent white,

Detaloid Staminodes

8861. Schizala elegans (Vahl) Sw. Schizaeac.
(2) Terrestrial forn on small
hammock in flooded open forest,
det Michel & Atehortum 1981.

8862. Gesnevice Gesnevice

(2) terrestrial herb on bank of lumber road. Corolla cream.

8863. Colastrac.
(2) Scandent vine in clearing in lowlying forest, Fruit opening in two halves, red. Seed black,

aril white.

8864. Acanthac.
(2) Sprawling herb in low wet sandy clearing along lumber road. Corolla red. 8865.

(1) Herb 1.5 m. tall on open roadside. Petals yellow, keel red orange at tip.

8866.

(1) Shrub Fo cm tall in low lying forest. Flowers greenish. 8867 Banisteriopsis pubipetala (Adr. Juss) Gates. (12)! High climbing liand in foto? open flooded forest. Petals
yellow. Friest pale green

turning projection. pc.
fruit of Hiraea fegitolia C. pc. 888 DOLIOCARPUS AMAZONICUS SLEUMER DILLENIZO.
(14) High Climbing Hana. Flowers white quowing in lowlying forest. DET. G. AYMARD 1989

FEB 1 8 1980

8870, Cariniana domestica (Mart.) Mièrs cythidac. (17) Tree 18 m, tall x 40 cm. diame growing at edge if low WOD sep. Fruit lying forest along road. In Fi. pendulous. Corolla orange. foto Androecium Cigginny white. Malpighize. (9) Vine among shrubs on J open roadside. Buds pink Petals pole pink. Filaments White: Anthers Cream. & +2 EMILIA FOSBERGII NICOLSON Composit. (9). Rosdside weed with white latex. Florets light red (DET. H. ROBINSON 1981) 88 +3. DIODIA KUNTZIA SCHUM. EX CHAR: Rubiac. (9) Coarse Newb with decumbert, then erect stems in wet roadside ditch. Corolla White, DET. J. KIRKBRIDE 1981

8869: AMAIOUA GUIANENSIS AUBL. RUDIBC.
(14) Tree 12 m fall X 15 cm. diam.

Fruit green to dark reddish

FEB 1 8 1980

8874, Ludwigla peruviano (L.) Ha... Onagrac (10) Coarse herb 1.5 m. tall in open marshy area along road, Petals beight yellow, 8875, Pharus latifolius L. Gram. (2) Herb in You Tying forest. 86 fb. Scleria secans (Li) VRB. Cypurac. (10) Abrasive climbing vine F in roadside thicket dut. g. Davidse 8877, Ichnanthus pallens GRAM. (6) Herb creeping rooting of nodes along togging road in low lying forest, let. Davider 1981. 8878. (gdista zeguinoctialis (L.) Miers Bignoniac (4) Liana in lowlying forest along logging road Fruit green De A. Gentry 1981. 8879 MICONIA HOLOSERICEA (L.) DC. Me/25tom. (11) Tree 6 m. tall x 10 cm. diam. in forest edge along lumber to ad, in Towlying

forest Fruit green

Leaves dark green above, Silvery brown beneath.

(bet. J.J. Wurdack, 1981)

8880. Mendoncia Acaminac.

(7) Vine in forest margin. along roadside. Corolla White with Ged stripes in throat. Fruit greenish white. 8881. Voyria tenella Hook Gentianac.
(6) Saprophytic herb in humus
in forest floor. Whole plant yellow.
(1) Saprophytic in humus in low
lying forest. Corolla blue. (DET. C. DAVIDSE, 1980)

8883. Streptogyna americana C. E. H. KTram.

(10) Grass in lowlying forest. 8884. (alyptrocarya glomerulata vec. yperac (9) Sedge in forest edge along Froad. det. g. Davidse 1980 8885, Nectandra cuspidata Nees Laurac. (11) diam. Petals white. In forest

FEB 1 8 1980

Margin.

8886.

(11) Vine on road side.

Petals yellow. Wings of
fruit dark red. 887. Dioccorea Dioscoreac.
(5) Twining vine in roadside thicket. Perianth reddish brown. 8888, RENGGERIA COMANS MEISHER (TUTTHERE (3) Tree 8 m. tall with white latex. Buds green (DET. B. MAGUIRE,) 8889 Ichnanthus colvesions (News) Doell (Tram. (14) growing in large clumps m. Hall. let. G. Davidse 1984. 8890. Cenchrus echinatus L. Gram. (NET. G. DAVIDSE, 1980) Gram. 8891, Fragrostis benella (L.) BEAUV. (Tram.
(II) Weed in Waste ground,

| 0012 | <i>-</i> 1 . | 1 . , | | ^ |
|--------------------|---|----------------------------------|--|---------|
| (11) | Eragrostis Weed in | pilosall | ground ale | ng road |
| | eptochloa Wood in | | | |
| 8894. E | ragrostis Weed in | ciliari wastegi | S (L.) R.Be DET. G. DAVIDSI TO MMO 2 | Gram. |
| 8895. <u>D</u> | Veed in w | nuda Sch aste gra det. Dev | iumach. sund alo idse 1980. | Gram, |
| 8896. <u>D</u> (7) | igitaria d | ciliaris | RETZ.) KOEL COET. G. DAVID Drand 2 / M | (T(2M. |
| (17) | Jucuna u Vine in reenish with irri- alowish b | thicket purple tating | hairs, | Fruits: |
| | | | | |

FEB 1 9 1980

19 Feb 19801 8898. Canna Indica L. Cannac. (14) Herb 3 m. tall growing (9+51vs.) on bank along small stream near road in secondary thicket. Bracks green, pruinos Calyx yellowish. Petals red. Stamihodes yellowish towards have, red Spically. Fruits green, brown at maturity. Selde Spherical, black. 8899. Ocimum gratissimum L. Labiat (3) Subshrub 1.5 m. tall in weedy roadside thicket. Flaverwhite Foliage Let R.M. Harley 1984. 8900, BIX2 Orelland L. Bixaclas (10) Spontaneous Shrub 3 m. tall on bank olong small streem in thicket Petals pale pink. Filaments yellow Evuits yellow green at base, dull red toward spex with n. V. Urucu

8901. Cassia Legum. (8) Substrub to 1.2 m. tall in weste ground along road. Flowers deep yellow. 8902. Sloanea Elaeocarp.
(8), Tree 15 m. tall x 25 cm. diam. in lowlying forest. Fruits light green. 8903. Engthroxylum subracemosum Turcz. Erythrox. (7) Shrub 2 m. tall in forest margin: Leaves dull dark green above, pale glaucous green beneath. Det. T. Plowman 8904. Ocotes glomerata (Nees) Mez Laurac.
(13) Shrub 3m to tree 10 m. tall. in forest mergin. Flowers dirty yellow. at. H.v. d. Wenff 1885. 8905. Psychotria RACEMOSA (AUBL.) RAEUSCH. RUB
(7) Shrub to 1 m. tell in low
lying forest. Fruits orange.

DET. KIRKBRIDE 1981 FEB 1 9 1980 Euphorb. 8906. Chaetocarpus echinocarpus (Baill.) Ducke
(8) Tree 8 m. tall x 15 cm dit. M.J. Huft 184. Buds cream. 8907. Adiantiapsis radiata (L.) Fee Fern (2) Terrestrial fern in low. Ly my forest, det J. Michel + Hebortus 1981. 8908. Plukenetis penninervis Mull. Arg. Euphorb.
(8) Climbing Vine in forest
margin along logging road.
Buds and fruits green
(1.) Links.
8909. Pityrogramma calomomelos ferm (3) Fern growing in logging road in forest leaves white underneath. 8910. Trichomanes pinnata Hedw. Fern (6) Terrestrial fern in forest. 8911. Malanea macrophylla Barl. Rubiac. (12) Liana 10 m. high in frest Fruit light green turning purplubblack at maturity. det. B. Boon 181.

8912. Trattinickia burserifolia (10) Tree 25 m, tall x 1,2 m, wood diam. "in lowlying forest.
Fruits green. 8913. Passiflora NITIDA HIBIK. Passiflorac (12) Vine in open thicket along foto road Fruits 9 lobose, bright brange at maturity. (11) Fern in lowlying forest, DET. MICKEL & ATEHORTUA 1981 8915. Cayaponia duckei Harms Cucurbit. (11) Liana in margin of forest in open thicket towers green. det. C. Jeffrey 1981. (9) Sprzwling herb in open Swamp along road. Flower whitish, Amaranth. 8916 8917 ACIOTIS CF. FRAGILIS (DC.) COGD. Melastom. (12) Herb to Im. growing in Whole plant red Petals pink.

FEB 1 9 1980

8918. Cyperus sphacelatus Rotto. Cyperac.
(11) Sedge growing in logging
F road det. g. Davidse 1980 8919 CTENITIS PROTEUSA (AFZ.) CHING. Fern (11) Terrestrial fern in shade of forest DET. MICKEL & ATEHORTUA 1981 8920. Adientum GLANCESCENS KL. Fern (11) Terrestrial form in Shook of forest. Leaves glaucous Le reath. DET. MICKEL & ATEHORTUA 1981 8921. POSOQUERIA SP. VEL AFF. P. LONGIFOLIA AUBL. (11) Tree 6 m. to 11 x 10 cm diam. Truit globose, green. In lowlying forest. 8922. Gurania Cucurbit.
(1) Herbaceous Vine in Ocondary thicket, Flowers 8923 Mandevilla symphytocorps Apocyn. (5) Vine in floo ded thicket. Corollo tube po le yellow with red blush. Lobes

deep yellow. det. A. J.M. Leeuwenberg 1981 8924 MELOCHIA ULMIFOLIA BENTH Stercul. (11) Shrub 1.5 m. tall in Se-Condery tricket. Flowers White, fragrant, DET. LJ. JOER 1998(M) 8925 TRICHOMANES OVALE (FOURNIER) W. BOER. HYMENOR (12) (relping fern appressed to Trunk of living the in forest DET. MICKEL & ATEHORTUA 1981 1926.
(1) High climbing lians in forest. Fruit globose, orange. 8927. Panicum pilosum Swartz Gram.
(7) Stoloniferous grass in logging road.

8928. Paspalum Daniculatum L.
(3) Clumped grass in logging
road. 8929. Orchidace
(1) Epiphytic orchid Ferinth
greepish white Lip greenish

white with purple Stripes.

FEB 1 9 1980

8930. Solanum americanum Mill. (5) Herb 75 cm, tall in logging road. Corolla white Anthets yellow. Berry black (5) Subshrub to Im, tall. (5) Substitute to Petals and stamens white: growing in logging road in forest. det. or grines 1981. 8932. Axonopus capillaris (LAM.) Tram.
(11) Grass in logging road in low Hing forest groad in 8933. Epidendrum Orchidze. (5) Epiphytu Orchid. Flowers Past. In forest. 8934 (araipa Gruttif. (7) Tree 18 m. tall x 30 cm; diam. In lowlying forest. Fruit brown. Sap gummy, 8935. Olyra latifolia L. (Fram.
(4) Frest margin. Culms to 1,5 m. tall.

8937. Lufta cylindrica (L.) M.J. Doen. Cucurbit. (12) Sprawling herbaceous vine in open thicket along road. Corolla yellow. Frolits to 50 cm. long green. 8938. Matayba Sapindac.
(9): Shrub 3 m. tall in Secondary
thicket Fruits green. Aril Orange. Seeds black. 8939. Annonac. (10) tree 15 m. tall x 25 cm. diam. Perianth dull yellowish areen to green, Stamens orange, Pistils green.

Arac. 8940 Monstera adansonii Schott var. laniata (Schott) Madison (9) Climbing epiphyte on tree 5 sots trunk in low lying forest. Spathe creamy white, turn-ing yellowisk. Spadix yel-low in fruit det. T. (rozt 183.

8936. Mendoncia Acanth. F(5) Liana in forest. Corolla red. 8941. Voyria Gentians.
(1) Saprophyte in lowlying frest. Stems pink. Flowers bright yellow.

8942. Typha DOMINGUENSIS PERS. Typhac.
(11) Plant 2.5 DET. KALLUPKI 1998

9. sets Open swamp along roadside.
Staminate spike yellow;
Pistillate spike pale green.

A. EXCELSUM BENTH. BET. W. HARCONDES-FERREIRE

8943 Aspidospermo marcgravianum Woods. Apocyn.
(12) Tree 25 m. tall x 1 m.
diam. with seven buttresser
and sinewy-fluted trunk
and Major branches - Fruits
light green at maturity,

Growing in lowlying forest. det. A.J. m. Leeuwenberg 1982.

944. Palicoure à marcgravii St. Hil. Rubiac.
(11) Thrubs little, Sm. tall growing
in pastures at Fazenda CAP.

Fach's and pedicels red. Fruits green. Foliagestaid to be very poisonous to cattle,

killed 13 head on this fazenda.

8945 Sematophyllum Subsimplex (Ledw.) Mitt. (11) Bryophyte; epiphytic on living tree trunk in low-lying forst.

Let. W.C. Steere 1981.

(Vell.) House Convolval.

(6) Frequent Vine in roadside thickets. Calyx dull deep pink Corolla bright. D.F. Auston 1981. 20 FEB 1980 FEB 20 1980 BRAZIL: Estado fara. Muncipio Conceição do Araguaia... Redenção, area of cerredo on outskirts west of town about 4 km from center of. Redenção along PA-150. Alt. c. 21 8947. Trachypogon Gram. (4) Annual along roadside. (11) RESPONDENCES TRIN. GREM. (11) 8950. Axonomus Siccus (NEES) KUHLH.
(II) GYZSS WITH IN

FEB 2 0 1980

| ED - 1200 |
|---|
| 895 1. AXONO DUS CANESCENS (NEES) PILGER (TOM. (11) COET. G. DAVIDSE, 1980) |
| 8952. Paspalum LANCIFLORUM TRIN. CTOM. (11) Foliage Pelatively Sparsel, Dubescent. |
| 8953. Mesosetum, Isliiforme. (Hochst.) Chase. (II) Plants decumbent at base and sparsely stoloni-ferous, Let Davide 1981. |
| 8954 Axonopus CANESCENS (NEES) PILGER STAM (NET. G. DAVIDSE, UPBO) Glaucous, |
| (11) Some EUL ms strongly de cumbent, tooting at base almost stoloniferous. On disturbed roadside; so. Derita 1/80. |
| (11) Foliage Stronly Publicant |

FEB 2 0 1980 F (II) CULINS de Cumbrin 182. 8958. Aristida riparia Trin. (12) Let. G. Davidse 1982. Gram. 8959. Paspalum GARDNERIANUM NEES (DET. G. DAVIDSE, 1900) Gram Gtam. (8) Paspalum plicatulum Michx.

(8) det Davidse 1980. 8961. Thrasya petrosa (Trin.) Chase (II) Gram. (21 Feb 1980): SAME LOCALITY 8962, Cablisianthus
(7) Perennial herb with deep woody
photo root. Corolla blue, det. Maas 1981. 8963. Hackelochba granularis (L.) Kuntzerram.
(4) In open area in cerrado. (DET. G. DAVIDSE,

8964, Aristida longifolia TRIN. Gram.
(9) In shade of tree islands in Cerrado. (DET. G. DAVIDSE, 1980)

FEB 21 1980

8965. Mikania <u>PSILOSTACHYA</u> DC. Composit.
(11) Climbing over Shrubs in 1981)
Cerrado, Florets White. (DET. H. ROBINSON 8966. Borreria de Rubia.

(2) Herb in gen gravelly area in cerrado. Flowers white. 8967. Borreria off. tenero De. Rubiac. (6) Annual herb. Corolla pale libic. Flowers blue, det. Kirkbride 1981. (3) Ahnual in open gravelly place in cerrado. Clear sap. Itami-nate flowers yellowish. 8969. Polygala Polygalac
(1) Flowers white with yellow
nector guide. 8970. Borreria Rubiac.
(8) Annual herb in cerrado.
Flowers pure white.

| 8971. Borrerio d. eryngioides Chem. + Ku. (4) Annual herb in Cerrado. Flowers white det. J. Kirkbride H. | |
|--|-------------|
| 8972. Dioccorez (8) Low twining vine. Flow yellow. | |
| 8973. Scleria bractesta Cav. Cy 6) In shade f tree Island in F Culms lax, semi-scandent det. 9. Davide 1980 8974. Schizdchyrum (1) | perac |
| 8974. Schizdehyrum | Tram. |
| 8975Phaseolus (1) Benner greenish purple. Wings dark purple lightowards bese Keel Creat White, twisted. Twining | my Vine |
| 8976. Champe crista nictitans (L.) (2) Erect sub shrub: Flowe yellow. Let. Barneby. 198 | legum Vs |

8977, Scheelez aff. exigua Drude? Halman 3 sets Acquilercent palmin 2 separate Cerrado. Le verto 1.5 m. fruits tall. Fruits brown det. S.F. Glassman 1985 8978, Ferdinandusa elliptica Pohl Rubiace
(3) Small tree 3 in tall in
tree Island in cerrado
Buds dark reddush kirklinde
1981. 8979.
(1) Erect herb. Petals
red. 8980. Seleria lithosperma (sw.) Nees Cyperac. (4) In Shade of trec island by in cerra do. det. T. Koyama 1981 8981. Cushea Lythroc (14) Stender herb in cerrado. Petals magenta. 8982. Solanum subinerme Jacq. Solande (8) Treelet 1.5 m; fall in cerredo Carolla Violet, Stanicios

deep yellow, det. m. nee 982.

FEB 2, 1 1980 Solanac. 8983. Brugmansia suaviolens (7) (4, + B. ex Willd.) Bercht. + Prest Redenção. Flowers creamy white, 8984. Panicum cervicatum Chase Gram. (5) In Shrub Island in Cerrado, Culms lax and laning. Let. G. Davidse 1982. 8985, Paspalum gemniflorum Steud. Grami (11). Let. Davidse 1980. 8986. Ichnanthus procurrens (NEES (TIOM.)
(b) Culms lax and straggling 1980) (3) Let. Davidae 1980. Gram. 8988, AXONODUS DERBEVANUS BLACK (Trans)
(9) Leaves Strongy distichous. (Tram. 8989. Rhynchospora barbata Kuntu (yperac. (5) det. g. Davidse 1980 8990 Bromelia sp. Bromeliac.

Cerrado. Leaves to Im. long. Fruits globose, yellow. 8992. Bredemeyera floribunda Willd. Polygalar. Sterile. det. Wurdack 1981. Juice of roots When beaten with water produces copious edible foam. (3) Calyx red-violet. Petals light blue violet, white at base, Bonner with green Ish rellow nector quide Hel Little 181th blee violet tip. 8994. Desmodium barbatum (1.) a Kuntze Legum Eact subshrub to 70 cm tall. Petals light blue-violet. growing in moist area in Cerrado. det. R. Berne by 1901. 8995. Croton chaeto calyx Muell Arg. Euphorb.
(11) Shrub Im. tall in histurbed cerrado. BRACTS red-

dish green. Perionth greenish

FEB 2 1 1980 white det. M. J. Huft 1984. 8996. Mollia Tiliac.
(10) Tree 6 m. tal' x 10 cm.
diam. in cerrado. Fruits brown. 8997. Caryocar brasiliense Comb. Caryocac. (6) Sterile det- G. T. Prance 1881. 8998. Cigsus cross Rich. Vitac. (5) Vine in cerrado along roadside in thicket. Calyx red Corolla orange Mature fruit black hoses bark 8999. Ipomoes Convolvul
(4) Vine in tree island. Corolla
tube white, lobes red violet. 900.
(12) Erect substitute to 1.5 m.
tall in cerrado Petals red.
Sepals green with readish stripes 9001. Helictères Sterculiace
(11) Shrub 3 m. tall in Cerrado. Fruits brown.

9002. Virola

(8) Tree Let 4 m. tall in cereda.

Flowers and inflorescence

rusty brown.

9003, Miconia MACROTHYRSA BENTH. Melaston. (6) I flirub 1.5 m. tall. Fruit green to red to purplish black. Leaves dark shiny green above dull tawny beneath. (DET. J.J. WURDACK, 1981)

9004. Mesechites trifida (Jacq.) M.- Arg. Apocynac. (3) Climbing Vine with white 12 tex. Corolla tube white at base, green spicelly, lobes yellow, green at throat det Leeuwenberg

9005. Solanum palina canthum Dunal Solanac Spiny shrub to 1.5 m. tall in rosdside. Young fruits light green with dark green "Verns", mature fruit yellow, globose. det. M. Nee 1982.

9006. Strychnos parvifolia A.DC. Loganiac (3) Armed scandent Shrub in thicket along brook in cerrado. Fruit green, det Krukoff 1981. 9007. Mabea paniculata Benth. Euphorb. (8) Shrub 1.5 m. tall in open foto light yellow, sometimes with 9008. Cissus erosa Rich. Vitac. (t) Vine in roadside thicket. Calýx pink, petals orange. Fruit green to black at maturity. Nodes and pedundes often dark 9009.
(9) Treelet 3 m. fall in cerrado.
Fruits derk wine red.

9010 NODIA TERES WALT.

(12) COBTSE roadside weed, densely, branched to 50 cm, dismeter.

Flowers Violet, DET. J. KIRKBRIDE 1981

FEB 2 1 1980

9011. Asclepian.
(1) Twining vine with white latex in tree island. Fruit brown 9012. VISMIZ CAYENNENSIS (JACQ.) Guttif. (8) Shrub 2 m. tell in cerisdo.
Potals yellow-green with white foto hairs Sepols-green, yellow at base 1996 Fruit green. 9013 Dimorphandra mollis Benth. Legumin tree 6 m. tall × 15 cm. diam. with thick corky books set. R. S. Cowan 181. Bignonia 9014. (1) Climbing vine. Corotta lobes pink, tube white. 9015. Croton GRACILIPES BAILLON (7) Subshrub to I m. tall in moist area in cerrado. Perionth reddish green, Stamens creamy white.

| 9016. Erythroxylum leptoneurum O. E. Schulz (2) Thrub I in fall in tree is land. Buds yellowish. Fruit green. Det. T. Plowman |
|--|
| is land. Buds yellowish. Fruit |
| green. Det. T. Plawman - |
| 9017. PTEROLEPIS TRICHOTOMA (ROTTE.) Melastom. |
| (7) Delicate annual herb in |
| marshy area in cerrade. Fila- |
| PINK, (DET. J.J. WURDACK, 1981) |
| PINK, (DET. J.J. WURDACK, 1981) |
| 9018, Polyge & MONTICOLA HIB.K. Polygelec. |
| in cerrado, wings and keel |
| red-Violet: (DET. J.J. WURDACK, 1981) |
| 9019. Chamaecrista trichopoda (Benth.) Legum (11) Sprawling herb with suberect |
| (11) Sprewling herb with suberect |
| Stems. Fls. deep yellow. det. R. Berneby 1981. |
| Car. K. Berner 9 1100 |
| 9020. Melpigh. |
| 9020. (7) Twining vine away hubs in cerrado, Petals pink, claw |
| Tellite 34thon 1 Ust law file |
| white; onthers yellar, fila- |

FEB 2 1 1980

9021. Mimosa Horibunda Willd. Legum. (10) Prickly shrub in rozaside thicket. Filements pink, det. R. Barneby 1911. Eryt max 9022. Enthroxylum Suberosum St. Hil. 9) I Dwerf treelet to 2 m. Det. T. Plowman fall - Mature fruit red. 9023. Zoysia tenuifolia Willder Trin Tram, (7) Stoloni ferous thizomatous F bwn gress forming bushy anoth under Shrubs I Cultivated houseyard in Redenção. let. Davidre 1981.

BRAZIL CHado D. .. A. Rosantos. Concerção do Araquaia. Alaci-Tandia, 42 km West of Conceiseu de Araguaia at Rio Arraias do Araquaia along highway PA 287. Alt. 300 m. C. 135, 4/36 W. 23 Feb 1900! 9024. Sabiceattia Rubiar. (12) Thorny vine roadside thicket along river, Fruits whitish beneath eallyx green turning red in fruit, corolla white; fruit whitish purple 9025 Croton Euplion
(11) Tree 5 m t=11; open roadside thicket along river. Leaves whitish green beneath; buds green perianth yellowish green. 9026 Diplopheris pauciflora (G.F. W. Meyer) Nied Malpigl. (7) Roadside thicket along river. Thining vine; pet 2/s yellow. det. gate 181. 9027 Riper tuberculatum Jacq. Piper. F Treelet in tall, give erect, creamy yellow, green in druit det. R. Callejas 1981

FEB 2 3 1980

9028 Turnera breviflora Moura TURN.
(8) Roadside thicket along river,
Shrub 1/2 m tall, petals deep
yellow. det. M. M. Arbo 1981.

9029 Aristolochia stomachoides thehme ARIST.

18) Roadside thicket along river.

Common name; angelico; the root is used for aseso.

Twining vino; flowers chestrul brain yellowish toward base, the hood dark brown on upper part, creawy white within and in throat with dark brown dots. Let. K. Barringer 1985.

9030 Cuphea LyTH

(8) Roadside thicket along river,

Herb to 1 m tall; upper stem and

pedicels carmine red; corolla ted

in lower 3/4, light green in upper

1/4 with dark green stripes.

(7) Roadside thicket along river,
Climbing wine; fruits lisht green;
petals green with whitish maryin.

det. Jeffrey 1981.

9032 Byttneria STERCI. (10) Roadside thicket along river Prickly, scandent shrub; sepals and petal dark purple; staminodes reddist purple. 9033 Alternanthera (b) Low wet thicket A MARAW. Sprawling herb; perianth white, anthers yellow. 9034 ACOSMIUM. Sp. LEG-CAES (11) Roadside thicket along river. Treelet 5 m tall. flowers white. 9035 Uncaria guianensis (Aubl.) Gmel. RUBIAC. 19) Koadside thicket along river. Sprawling scandent vine up to 5 m dirty orange with age det. B. Boom 1981 9036 Heteropterys mocradena (D.) Anders. MALPIGH (6) Roadside thicket along river. Climbing woody vine inflorescence and calyx yellowish brown; petals lisht yellow, Filaments pale yellow; anthers orange. det. W.R. Anderson (16).

FEB 2 3 1980 9037 Paragonia pyramidate (L. Rich) Bur. BIGNON, (11) Roadside thicket along river. Climbing lians to 4 m high; calys reddish purple; corolla tube pinkish white, the lobes pale pink, white at the throat fruit green. 9038 MACHAONIA ACUMINATA HILB. RUBIAC. Roadside thicket along river, (11) Densely branched treelet, 3 m tall. flowers pure white DET. J. KIRKBRIDE 1981 Schwenkia grandiflora Benth, SOLAN 9039 Roadside thicket along river. (7)Twining vine corolla greenish white, Gouanis discolor Benth. RHAM 9040 Roadside thicket along river. (17) Climbing vine to 3 m hish; fruits brown. det. M.C. Johnston Columbrina retusa var. latifolia (Reiss.) M.C. Johnston 9041 (12) Roadside thicket along river. Treelet to 4 m tell; petels creamy white fruits green goep2 I pomoca alba L. CONVOLV. (6) Roadside thicket along river. Climbin,

herbaceous vine; flowers pure white.

9043 Byrsonims MALPIG. (11) Roadside thicket along river. . Shrub 3 m tall; corolla brisht yellow, disc deep yellow; fruits deep red.

9044 Poullinia SAPIND. (2) Roadside thicket along river. Climbia, vine; fruits green.

RUTAC: 9045 (10) Edge of secondary forest. Shrub, 2 in tall; coralla pure white, fragrant.

B16N. 9046 (1) Open roadside thicket. Scrambling vine; corolla dull pink.

9047 Lasiacis sorghoidea (Desv.) Hitche & Chase (9) Marsin of secondary forest. 9047 Culms 3 m tall; fruits shing black, Culms musterd yellow.
(BET. G. DAVIDSE, 1980)

FEB 2 3 1980

9048 Trichilia pallida Sw. MELIAC.

(2) Secondary forest understory Treelet 21/2 m tall; calyx yellowish green in bud. det. Pennington 1/82. 9049 Psychotria bahiensis DC. RUBIAC Secondary forest. det. Kirkbride 1982. (9) Understory shrub to 1 m tall; pedicet white at maturity. Cephrelis RubiAc
Secondary forest. 9050 (10) Shrub to 12 m tall, inflorescure modding; peducle yellowish green fred bracks deep red violet; fruits white. Siparuna SP. NOV. (J. JANCOUX) MONIM. 9051 Secondary forest, (8) Treelet 21/2 m tall; fruits pale yellow green with red blush. 9052 LEG-PAP (2) Roadside weed Im tall; flowers deep yellow. 9052

9053 Commelina bengholensis L. COMMEC. (10) Weedy field. Sprawling herb; corolla us sky blue. det. R. Faden 1/81. 9054 Waltheria americana L. STERC. pale yellow. det. P. Matekaitis 1982 9055 Sida cordifolia L. MALV. (8) Roadside weed, to 1 m tall; corolla pale yellow orange with reddish band at the base anthers and stigmas yellow. MALV. 9056 Sidz sp. (8) Roadside weed to am tall; corolla pale yellow orange throughout: enthers yellow orange; styles brisht red. let. P. Fryxell 1/82. 9057 Heliconia hirsuta L.f. MUSAC. (12) Low marshy area along road. Plants 3 m tall; bracks greenish orange; pedicels greenish orange; Protos) ovary yellow in lower half, dark green in upper half; perianth let. L. dark green; leaves dull dark Au derson 1982. green above, dull green beneath, pruinuse FEB 2 3 1980

Acalypha arvens is Poeg. + Endl. EUPH. 9058 (11) Weedy pasture det. M. J. Huft 1984 Herb: male inflorescences creamy yellow. pistillate inflorescence light green, the styles green. 9059 Heliconia psittacorum L.f. MUSK, (15) Low marshy arez along road. Plants to 2 m tall rachis
orange; bracks red throughout; (Photos) pedicel and ovary completely orange; perianth orange in Tower 2/3, dark green in the upper 13. 9060 Solanum melongena L. SOLAN (10) Cultivated shrup to im tall; corolla white; anthers deep yellow; immature fruit white, n. v. gilow. Common

Rosa, C. S. Rosario and M. R. dos Santos. BRAZIL: ESTADO PARA: MUNICIPIO Conceição do Araquaio, Kange of north-south lying hills, Araquaia. 80/6's, 49°22'w 24 Feb 1980. Ca. 350m, eles, 9061. Virola Myristinac.
(11) Tree Il in tell x 15 cm diem side forest, Buds rusty brown. 9062. Sapotac. wood diameter in hillside forest. 9063 Apuleid sp. nov. Legum.
(11) Tree 12 m tall x 30 cm. diam. Fruits brown. det. Concer 19. 9064. S2/00t.
(14) Tree 10 m t211 x 20 cm. Sep. fruit green. Seeds shiny brown. 9065. Gonzalagunia Rubiac. (10) Skrub 2m. tell in forest. Corollo white.

9066, Palicoures off. longiflors (Aubl.) L.C. Rich. Rubiac. for est understory Rachis and pedicels carmine pink. Fruit light of reen, det. Kirkbride 1981 9067 CHOMELIA CF. PARVIFLORA (M. ARG.) M. ARG. RUB. (19) _ bhrub 3 m. tall in forest understory. Fruits OTERM. DET. J. KIRKBRIDE 1981 9068. Erythroxy lum subracemosum Turez Erythrox Wood understory. Sterile.

Wood: Understory. Sterile.

Rubjac.

Rubjac. (11) Tree 7 m. tall x 10 cm. diam, in forest, truits deep yellow DET. J. KIRKBRIDE 1981 9070. Abuta grandifolia (MART.) Menisp.
(11) Thrus 2 m. tall in forest understory, young fruits.
green. (DET. B.A. KRUKOFF, 1981) · # 5 1127 = 9129.

FEB 2 4 1980 9071. Anemià OBLONGIFOLIA (CAV.) SW. Schizzeac.
(12) Fern in crevice of boulder
in forest, DET. HICKELA ATEHORTUA 1981 9072. Plumeria (1) Treelet 3 m. tall in forest.

Latex abundant, white,

Flowers white,

9073. Maprounes guianensis Euphorb.

(12) Tree 13 m tall x 35 cm

diam in forest, Fruits

green, det-M.J. Huft 184. 9074.
(1) Herb in crevice of boulder
in forest. Brects light green.
Corolla whitish with violet.
blush. 9075. Diospyros sp. Ebenac. (10) Tree 13 m. tall x 35 cm. Woop diam in hillside forest. Fruits globose, green.

9076. Blechnem fraxineum Willd. Fern (5) In crevice on large boulder.

BRAZIL: ESTADO PARA: municipio de Conceição do Araquaia. Conceição de Araquaia. Outskirts of Trown along road 2 km. west of town. 300 m. 21t. 24 Feb 1980, Aprox. 8°15'5, 49°18'W 9077, SiDanea HISPIDA BENTH EX WERNHUBIAC (12) Substitute to 50 cm tall in open mersh. Corolla tube red lobes pink, DET. J. KIRKBRIDE 1981 9078. Psychotrio carthaginensis Jacq. Rubiac, (7) Degraded gallery forest with Mauritia palms Tree 4 m. tall x 5 cm dism. Corolle completely White, det. Kirkbride 1981. 9079, Palicourea Rubize.
(1) Shrub 2 m. tall. Infl. rachis and pedicels red. Fruit green to black at maturity.

9080. Psychotria hoffmennseggiana Rubiac (7) Degraded gallery forest. Understory shrub to 1.5 m. tall Pedicel and bracks purple Fruit green-to black at materity. 9081, Phoradendron Loranth. (13) Pendulous hemi parasite on Bauhinia sp. in marshy thicket Infl. 2nd flowers mustard yellow, 1082 - DIODIA MACROPHYLLA SCHUM. EX CHAR UDIZC (7) In roadside marsh with sedges dominant, Long-decumbent at base, Corolla. White, DET. J. KIRKBRIDE 1981 9083 - DIODIA SPICATA MIRVEL EX CHAR. RUDIZC. (7) In roadside Marsh with sedges dominant. Erect hero long decumbent at base, Flowers white.

DET. J. KIRKBRIDE 1981

FEB 2 4 1980

9084. Bouhinia ungulata L. Logum. (5) Shrub 1.5 m. tell on roadside. Petals white. det. J. grines 1964 9085, Ischnosiphon, Marant, (4) Herb I'm tall in edge of gallery forest. Bracks streaked with carmine red. 9086. Scleria microcarpa Nees Cyperac. F (10) Dominant species in open Warsh, det. T. Koyama 1981 9087. Rhychospora Cyperac. (5) Edge of gallery forest among sedges in marshy 9088, Polypodium Polypodiaco.
(9) Climbing fern in gellery 9089. Panicum pilosum wartz Gram.
10+ In gallery forest. Inflorescences from derk reddish

brown to green,

(8) Rosulate herb in marsh with shrubs. Inflores cences light brown some proliferous 9091, Rhychospora Cephalotis Vahl Cyperac (6) In sedge marsh at edge F of degre Led gallery forest. growing in Bracktumps. det. g. Davidse 1980 909.2. Twining vine to 2 m. tell in margin of gallery forest. Lestes Shiny green Jabove, dull green beneath with red nerves. Corolla yellow, upper half red with-out; basal part of tube greenish yellow; tube yellow within with red orange stripes. (2) Understory shrub Im. tall

in gallery forest. Corolla

Date blue without, sky blue within, det. Kirkbride 1991.

9090, SYNGONANTHOS DENSIFLORUS VAR. EFICEUL.

9094. Alibertia edulis (L.C. Rich) A.C. Rich. Rubiac. (5). Tree let 3 m. tall. Fruit green, in Margin of degrades 9095. Orchidac.
(2) Terrestrial orchid in open
marsh. Perianth pale yellow. 9096. Cyperus haspan L. Cyperac.

19 Sedge in open Marsh.

F Stems strongly triangular,
dark red toward base,
det. 9. Davidse 1980

9097. Diplacrum longifolium c. B. clarke ex Surand.

(11) (11) Dominant Sedge in rosd-F side Marsh. Rhizoma tous. 9098. PASPALUM Gram.
(12) Growing in wet sand Large bunch grass to 1.75m 9094. Mikania psilostochya DC. det. Robinson (3) Twining vine at edge of gallery forest, Florets White,

9100, Scheria cyperina Kunth. Cyperae. (7) Sedge in degraded gollery Forest. Scandent climbing I vine to 4 m. tall det. T. Koyama 1981 910 L. Isachne POLYGONOIDES (LAM.) DOELL Tram. (11). Roadside Marst. Culms nodes DET. G. DAVIDSE, 1988 et. Davidse 1986. 9102, Calyptrocarya poeppigiana Kunth. Cyperac. (II) In shall of digraded gallery forest. Some Sprielets pro liferous, det. T. Koyama 1981 9103. Panicum Eyanescens nees - Gram (3) In edge of degrated gallery forest, Culms weak sprawling in bushes, det. Duidae 1981.

9104. Paspalum MARITIMUM TRIN. (Fram: OBT. G. DANIDSE. 1980)

Dominant Grass in Poadside

embankment. Strongly rinizorma
four and also forms llong Stolons.

FEB 2 4 1980

9105. Eleocharis filiculmis Cyperac (11) Sedge marsh in edge of F gallery forest det. G. Davidse 1987. Gram. 9106. Andropogon leucostachys H.B.K. (b) growing in Wet sand leading to gallery forest. 9107. Panicum laxum Swartz (Tram. (11) In marshy Pasture leading to gallery forest. 4/08, Panicum cyanescens nees Gram. (11) Marsh in edge of gallery frest, Culms, erect to strongly de-cumbent at base, det-Devidor 1981. 7109 Fuirena umbellata Rotto Cyperac (7) In roadside sedge marsh. F Rhizomatous sedge, 9110. Xyris
(1) In marsh leading to gollery
forest. Flowers yellow. F (7) In met sand leading to gallery forest, Rhizomatous herb, det. T. Koyama 1981

| 913 (7) | Xyris fallex In mar to gallery yellow. Torulinium odo yellow. Yellow. Marii Jedge Ma degraded | det. R. Krel 118 rotum (L.) Hoosen d scus sp. off. hermoph det. T. Koyama 198 rsh at ec | roditus Urb. Cyperac |
|------------|--|---|----------------------|
| | Coperonia coston In Mai gallery fore archine Si Flowers | est. Scand ubshrub ! white det | M.J. Huft 1984. |
| 9115 | Shrub leading to Petals W | 1.5 m. tall | orest. |
| 911 | Herb in Margin of Whole plan Petals wh | pellery t | -onesti |

9117. Ouratea Ochnac (4) Erect shrub to 2m tell with long horizontal branches, Petals yellow. young frait green. 9118. Cocco cypselum GUIANENSIS (AUBL.) (7) Creeping herb With long. Lecumbent reddish stems under shrubs in marsh leading into gallery forest. Corolla poleviolet. Fruits Sky bul, DET. J. KIRKBRIDE 1981 9119. Clidemia HIRTA (L.) D.DOD Melzst. (1) Subshrub 50 cm tall in open Marsh 2 long road-Gide, Flowers white, Mature Print derk blue, (DET. J.J. WURDECK, 1981) 9120, Cuphez (12) Straggly herb in Marsh leading to gallery forest. To I'm tall, Calyx green. Petals pink with red medial

9121. Mimosa orthocorpo Benth. det. Barneby 1986 (8) Herb on grassy roadbank. Filaments pale pink det. Barnely. 1987. 1722, Tonnina fluviatilis Aubl. - Ériocaul. (10) Herb with decumbent stems in open Marsh, (DET. H. HOLDENKE, 1981) 9123. Blechnum serrulatum Rich. Fern (12) Fern in open marsh along 9124, Chelonanthus status complex Gentianac (6) Herb in Marsh leading pole yellow, forest, Corolla pole yellow, fruit green, 9125. MI CONIZ ALTERNANS NAVD. Melzestom. (11) Treelet 3 m. tall in marsh at Margin of gallery forest. Fruits green to derk red to purple black at maturity (DET. J. T. WURDACK, 1901) 9126, Desmodium Canum (Gmel.) thell. (4) Herb in weedy grass To est side. Corolla pure white Barnely FEB 2 4 1980 Same Date. 9061. 9127.
(2) Erect fungus on forest
flor, deep pinh. (2) On forest floor. Gp + Stipe bright red, gills pale red. (7) Erect fungus on forest. floor, pele pink throughout.

Collectors: T. Plauman, G. Davidse, N.A. Rosa, C. S. Rosario and M.R. dos Santos. BRAZIL: ESTADO GOIAS. Municipio de Conto Magalhões. 7 km. 882st of Ria Araguaia 25 Pet 1980. Approx. 8° 18'5, 49°13'N 9130. Trachy pogon SPICATUS (L.A.) KUNTZE Kin (9) One of the dominant grasses E" in cerrado savanna, DET. T. FILGUEIRAS, 1998 BRAZIL: ESTA DO GOIAS. Municipio de Conto Magalhaes. 16 km West of Piquizeiro. Approx. 8°20'S, 49°10'W. 9131. Thrasya PETROSA (TRIN.) CHASE Gram
(4) In Cerrado Savanna. 132. Paspalum LANCIFLORUM TRIA.

(T) In Cerrado Savanno. 9133, Paspalum ASPIDOTES TRID.

(7) In Corredo Savanna. Gram. 9134. Panicum olyroides H.B.K.
(3) In certado Surna.

FEB 2 5 1980 9135 Trachypagon Gram. (9) In cerrado savanna. 9136. Ichnanthus hoffmannseggii (Fram. (11) In shade of tree Island-in cerrado, Let. Davidse 1981. 9137. Erythroxylum suberosum Erythrox (b) Dwarf Shrub Im. tall one of dominant shrube in cerrado savarina, Luds yellon. Fruits greln.

Det. T. Plowman FEB 25 1988 BRAZIL: PROV. GOIAS. MUNI-CiPio DE PIQUIZEIRO. 4 km. West of Piguizeiro 21mg 25 Feb 1980 Approx - 8°34'5, 4858'W 9138. Maranta pobliano Koern. Marantac. (16) Rhizomatorus herb with sinde erect stem to 75 cm. tall, with many spreading branches. Olyx + corolla volute Staminodes finged violet. Stanes White det. L. Andersson 1985.

Collectors: T. Plowman, G. Davidse, N.A. Rosa, C. S. Rosario and M.R. dos Santos DE PEQUIZEIRO 10 16 Km Southeast of Pequizeiro Approx. 8°38'S, 48°52'W 9139, Irachypogon SPICATUS (L.A.) KUNTZEGIOMI (8) Dominant grass in cerrado Savanna, DET.T. FILGUEIRAS, 1998

Approx. 8°40'S, 48°50' Wars GALT.

Ca. 20 km least of Piquizeiro S80 m 9,40, Trachy Dog on SPICATUS (L.F.) KUNTZETPEM (11) Dominant grass in hilly cerrado savanna, DET.T. FILGUEIRAS, MAR FEB 2 6 1980 TEIATIL PROV GUIA MUNICIPIO de Couarai 10.km. north of quarat along Belém-Brasilia highway. (BR-153). Alt. 400 M. 26 Feb 1980. Approx. 8°44's, 48°31'W. Cerrado with Wisely and us Thees and Shrubs on sandy soil 9141. Sida cerrado ensis Krapovickas Malvac. Let. P. Fryxell 1982,

FEB 2 6 1980

(b) Herb. Corolla reddish

purple 9,43. Cuphea Lythra

(1) Herb in corrado Graffa

ved violet, velvety violet t

are of when sofuls 9144, Banisteriopsis Stellaris (Gr.) Gales Molpgh.
(II) Scandent Shrub in
Cerrado. Petals and filaments white Anthers yellow. Wings of immeture filit green to Let. Gotes 1982. reddish. 9145 Staelia virgata Rubiac (2) Herb. Flowers completely white det. Kirkbride 9146 (DSSIZ (Benth.) Irwin + Barnely LoguM. (11) Singshrub 1.5 m tall epsls yellow green, upper reddish. Petals and stomens deep yellow.

9148. Peltodon tomentosus Pohl Labiatae (8) Herb 2 m. tall. Heads purplish brown. Corolla white lower lip pale litze. Filaments red. Foliage mot aromatic, 9149. Stylosonthe Legum. Papilion. (10) Erect herb. Petals yellow, banner with red stripe. 9150, Marsypianthes of chamaedrys (Vahl) Kuntze Labiatae (2) (alyx dill dark violet. (corolla blue violet, upper lip with white nector guide ut. V.E. Rudd. 9151: Axonopus Burchelli Black (Fram. (DET. C. DAVIDSE, 1980)
(11) Annual grass. 9152. Axonopus PRESSUS (NEES EX STEUD.) CTAM.
(6) Erect Perennial. (DET-G. DAVIDSE, 1980) (6) Erect 24 MUZL. (DET. G. DAVIDSE, 1980)

19147. Bulbostulis junciformis Liebn (4perac. Ny (3!) Spikelets brown det: T. Koyama FEB 2 6 1980 9154, Paspalum Gram 9155, Paspalum Gram.
(9) Erect to decumbent annual. 9156. Paspalum Gram.
(7) Erect annual, glabious
form freely intermixed with
pubescent form (#9157). 9157. Paspalum Gram.
(7) Erect annual, pubescent form; freely intermixed with glabrous form (#9156). 9158. Hirtella Rosac.
(1) Dwarf Shrub 70 cm. tall.
Fruit dark purple green. 9159. Cordia superba Cham. Boragin.
(8) Low shrub 80 cm. tall.
Corolla Cresmi Fruit green.
(Munroex Doele) Stiele
9160 Echinolden a oplismenoides Cresm. (13) Erect annual, frequent in open sandy : Blaces det Davids 1987.

Same collectors. FEB 2 6 1980 9161. Trachy pogon Grami BRAZIL: PROV. GOTAFEB 261980 Municipio de Babaçulandia. 18 km. southwest of Wanderlandia 21 ong Belém-Bracilia highway. (BR-153). Alt. 420 m. 26 Feb. 1980. G. 6 56'5, 48°05'W. Open cerrado with scattered trees, Mesosetum sp. dominant grass. Sandy sail. 9162, Camptosema aff. ellipticum (Desv.) Legum-Papil. (9) Thining vine among Shrubs Banner deep recpirk, wings rose pink. Keel R.H. Maxwell 1982. 9/63, Staelia sp. Rubiac. (7) Her in bare open Sandy area det. Kirkbrite 1981. 9164. Arachis burchellii Krap. + gregined. Legum. Let. A. Krepovickes wask 1981. NY

FEB 2 6 1980 9165. Chompecristo flexuoso (L.) greene (3) Erect herb. Flore ers yellow. 9166. Amasonia hirta Benth. Verbenas (8) Erect herb with slender Corolla pale yellow. Mature fruit black, bracts dark red in fruit. det. mold. 9/67. Mimosa somians H.+B. ex Willd. Legum (12) Prickly prostrate herb. Colyx white Filaments pink, let. Barrely 9168. Qualea PARVIFLORA MART. VOCHYSIZC (10) Treelet 4 m. tall x 15 cm. 969. Bulbost 4115 Juncitormis Liebra yperales F (10) Erect perennial. Spikelets light brown. Det. T. Koyama 1981 9170, Paspalum mormoratum Kuhlm. Gram (6) Erect annual. Pilose, form growing intermixed with glabrous form (#9174), Spikelets biconvex. det. Davidse 1980.

9171 Paspalum (12) Erect annual. Gram. 9172. Bulbostylis conifera c.B. Clarke
(11) det. T. Koyama 1981 9173, Paspalum MACRANTHICIUM L. PARODI (Tram. (11) Erict annual. Glabrous form growing intermixed with pilose form (#9170). Spikelits bi convex, DET. FILGUERAS, 1998 9174, Paspalum marmoratum Kuhlm. Gram. (2) Erect annual, det. Devidor 1981. (IP) Erect CARDENERIANUM NEES
(DET. G. DAVIDSE, 1980) CIPM. 91 & CHROMOLAENA SQUALIDA LDC.) K. CR. Comp. (11) Substrub to 80 cm. tall. Bluds Whitish. (DET. H. ROBINSON 1981)

paniculate Vogel var. subvelutinum Benth. Smith

9177 Sclero to bium of Spaniculation Vogel 183.

(11) Tree 10 m. tall x 20 cm. wood diem. Leaves dark green above silvery beneath. Pruits

FFB 2 6 1980 9178. Sapotace (11) Tree 5 m. tall x 10 cm. wood diam. with white latex, Flowers green' 9179, smilax Liliac, (12) Climbing vine to 2 mi long, among shrubs. Fruits green. 9180. Hackelochloa granularis (L) Gram; (6) Grass, (DET. G. DAVIDSE, 1980) 9181. Aristida longifolià Trin. (Gram. (12) growing in shade of tree island. 9182. Bauhinia rufa (Bong.) Stend. Legum. (7) Shrub Im. tall with blood crown. Fruit green det J. grines 181. 9183 BLEPHARODON NITIOUM FOURD. ASCRDIBACE (8) TWINING VINE to 2.5 m long, Latex white Corolla Fruit green, corona white, at apex and on lower side.

Enthrox 9184. Erythroxylum pruinosum O. E. Schulz (7) Shrob to 1.5 m. tall growing from Stump burned off at ground level: Stems redduh brown, be coming thick Corky, lest blade u turked laterally, Shiny medium Green above, pole dull green beneath. Flower buds (1+9186) in annually sun a certado posture Amaranth. (3) Perennial from woody xylo-podium. Perionth yellowish to purplish, Anthers yellow. Erythrex 9186 Erythroxylum Suberosum J. Hil. (10) - Jurub to I'm tall arising from stump burned back to The ground. Stems, light tan. Apical branchlets strongly disfichous. Leeves me dium green Shiny above, dull pale green beneath young buds light green. Growing with E. fortuosum (# 9184) in annually burned cerrado posture.

. Plowman

9187. Helicheres . Sterculie, 18). Shrub to 1.5 m. tall. Carolla bright red, filaments dull dack reddish purple. Style green. Fruit green. 9188. Verbenac? cream. Corolla tube white. Lobes lilac. 9189. ALTERNANTHERA MARTII (MOR.) AMAYANTH.

(10) Annual herb. Inflores unce

Silvery White, DET. T.M. PEDERSEN, 1999 9190, Schizachyrium gram (10) Erect perennial. 9191. Trachypogon Gram 9192 Centrosema venosum Mart. Legum- Papil. (2) Twining vine, Corolla reddish violet, borner with greenish yellow nector quide. Tuber moni li form det- Barneby 1981.

9193. Mesosetum loliiforme (Hochst.) Cheeft = 1981.

13) Stoloniferor det. Dividue 1981.

1194. Digi ori Gardneri Henr. 91200)
(18) Gardneri Henr. 1980)
(18) Sticky.

BRAZIL: Estado Goiás. Municipio de

Soil + soch Tacant inopolis. Belom-Brasilia Highway

(BR-15), 55 km. Southwest of Estreito. Ribeirao

(ordai do Corrego. Alt 480 m. 27 Feb 1980,

Cerrado among sandstone Mesas. Sandy +1001

9195. Aristolochia

(2) Twining vine. Fruit brownish green.

In cerredo woodland.

(7) Treelets in tall with open crown on grassy roadside. Corolla blu-violet. Anthers yellow, whitish blue on back, let. M. New 1982.

9196. Solanum crinitum Lam. Solanac.

9197 Combretum mellifluum Eichl. Combretac. (7) Scendent Shrub 3 m. in low wood-

filaments white, anthers brown. Fruit green to greenish brown.

det. C. Stace 181.

9198. Rhychospora comata Schultes Green
(3) In Shade of low gallery forest

Fin cerrado. Spikeleta whitish green
NY to light brown let. T. Koyama 1981 (8) In cerrado wood and on talmson below low sondstone cliff in rock. and Sandy Soil. 9200, Controcklos singularis Swallen (Tes (26) In cerrado wood and in deep Sandy Soil. Spitelet publicance golden brown to dark violet. det. Davidse 1980. 9201, Paspalom CONTRACTUM PILGER Gram.
(II) In cerrada word and on talus.
Slope below low sandstone cliff
in rocky and sandy Soil. 9202. Paspalum Gram.
(11) In cerrado woodland in deep
Sandy Sail. Erect annual. (7) - In cerrado wood and in deep

Sandy Soil, Annu, erec

Somewhat decumbent at base. 9204. Ichnanthus opliemenoides Gram.
(10) Erect annual in cerrado woodland in deep sondy soil. JE. JUOZIEWICZ 1990 Sp. NN. 9205. Pitesirnes serradicale L.B. Smith Bromeliace
(4) Bromeliad on low sands tone cliff in corn de Intervodes of Scape pinkish to red Brook light · nellonish green reddish towerd Itip of inflorescence. Perianth red. filaments white anther yellow. 9206. Frythroxylum prob. sp. nov. Erythrox. (11) - Treetet 4 m. 201 x 2 cm. Luc-analysis diameter with Stories branches.

foto. E in low gallery forest in cerrase

rocky and savcy soil

12:8 K Branch ets flattened in one plane. New twigs US mustard yellow, Leaves medium green, dull above, Mo glaucous dull pale green beneath, undulate at margin. Det. T. Plowman Erythox, 3) NY Shrub 2 m. tall in uncer-Cher Story of la galley frest in rocky and

FEB 2 7 1980

Sandy Soil Branches light green truigs dank red-brown. Leaver Somewhat shing, medium green above, pale dall glancours green beneath. Stipules yellowish green.

Erythroxy lum prob. sp. nov. Iff. E., Det. T. Plowman 1984. pelleterianum

Shrub 2 m. tall in underStory of low gallery forest in

F (14) Det. T. Plowman 1984. pelleterianum

Ny Shrub 2 m. tall in under
K Story of low gallery forest in

Cest do region in rocky 2 mich that Sail Branchets light

With that Sand Sail Branchets light

Leaves Medium to light glow.

Leaves Medium to light glow.

Cous green beneath, margin

Strongly undulate,

9209. Erythroxylum barbatum O. E. Schulz (6) Slender treelet 5m. tall

Det. T. Plowman 2 cm diameter in low

Forest in cerredo

forest region, with rocky and sendy

aff. E. pelleterianum

Soil. Branchlets light greyish ton. Stipules rust; reddish brown. Leaves mostly at branchlet tips, light somewhat she green seventh. very pale glav cous green seventh.

9210 Engthroxylum Sp. prob. nov. Erythrox.

(9) Tree 8 m. -all x icm dish

with open Spreading crown and stores

Ny branches, Bark thin, H. brown, longi
F tudinally and transversely cracked, sher
K ding reddily in rectaigular flakes. Branch lets

wood light brown, flattened in one plane. The most twigs musters yellow beaves medium to light has year, dull, soore dull glowicous, pole green

Ku beneath, wargin strongly undulate, Sterile
G. Growing in low gallery forest near small stream
in cerrado area in sandy and rocky soil.

Det. T. Plowman

4211. Erythroxylum barostum D.E. Schulz

(15) Stender tree 6 in toll x 4 cm a foto di-in with short column or a course growing in low gallery us-clam forest in cerro do with rocky + formal. Sandy soil. Bark smooth, thin

FFB 2 7 1980 light greyish to reddish brown, somewhat shing. Leaves medium WOOD HW green, somewhat shing above, Uw very pale glaucous green beneath. MADW Stipules rusty red-brown Ster & Erythroxylum squametum Sw. Frythiox.

Tree 10 m. tell x 8 cm.

dismeter with open crown. Lis-clom. Leaves dack shing green de light shing yellowit-green beneath, stipules wood: Uw Gololight green. Bark light brown, rufulose with irregularly longitudi Det. T. Plowmanhal fissures, not readily expoliating Frythrax. Erythroxylum subracemosum lurez. (8) Shrub 3 in tall in morgiof low gallery forest in Cerrado to rocky and saidy (voo) Loucher Lf. chem. Si Twigs light green, Leaves MAD MAD - 1214 hied in greek, somewhat sking above oul relegizations Det. T. Plan

green beneatt: Sterile.

Bark light brown, longitudinelly

cracked.

7214 Ery Waxy lun subracemosum Tures Treslet 5 m o' x 5 cm diameter in open margin

B-Fls. of low gallery forest in chrado Twigs light brown. Leaver medcum yellowish green, somewhat Shiny above: pole dell' garrens

gred line of Petals crown White Det. T. Plowman (ATT) K

975. Erythroxylum sp. prob. nov,

Det. T. Plowman My Skyder treelet 3 m. tall x 1000 K 1.5 cm. diem. in low gallere no forest in ce do on rocky and

expoliating in thin flakes Branches light gray, twigs dark reddish brown. Leaves somewhat shing, medium green above; glaucous dull pale green beneath-Stipules yellowish

green Sterile:

FAAU

fotos.

Erythro 9216. Enthroy lum barbatum O. E. Schulz (15) Slender Till 6 m, tall x 5 cm. diem. with short cylin. drical crown Bark smooth, thin. Leaves medium, somewhat show green above; very pale dull glavcous Green beneath, Stipules rusty red-brain Growing in low gallery forest in rocky and sandy soil in cerrado area. Det. T. Plowman 9217. Emphorbis
(4) Stemo dark red. Leaves dark red to green latex white. Personth white. Herb in cerrado. 9218. (25512 Brit + Killip. Legum. (b) Erect herb on roadside in Cerrado, Flowers yellow det. Barneby 9219 RICHARDIA GRANDIFLORA (CHAM. & SCHL.) SCHULT. & SCHOL (11) Annual herb in sandy cer. Corolla pure white, spening 2 bruptly (2 10 2M. DET. KIRKBRIDE 1981

9220 DIONA TERES WALT. Rubizc. (11) Huncial Nerb in sawy ceral Corll tube white, lobes violet.

Green Stews to who Set. M.J. Huft 184.

1222 Paspalum SUBSEQUIGLOME DOELL Gram

Exect and us in certato was and on dell some soil. 9223, Pas 12 UM MACRANTHECIUM L. PARODI CTIZM. (11) Erect annual in cerrado wood bet. T. FILGUEIRAS, 1998 9224 Aristida setifolia H.B.K. Gram. (10) Roadside annual in cerrado region. 9225, Axonopus siccos (NEES) KUHLHI Gram.
(11) In cerrado woodland in deep sandy soil. Erect perennial in large clumps. 9226. Trzchypogen
(8) In cerra do woodland in deep sandy soil.
Plants green to glaucous, pubescent
to glabrous.

Georgia 9227. (17) On sandstone cliff and talus

9221. Criton microcarpus Muell. Arg. Euphorb.

Flowers creamy, white; fruit light

Slope in cerrado woodland.
Corolla Violet blue, dark purple at
base of lower lobes, throat white
Tube white. Leaves dark green
above, reddish violet beneath
Rhizome horizontal.

9228. Dioscorea

(2) Twining vine Im: tall in low
gallery forest in rocky and sandy
Soil. Flowers pale yellow.
In cerrado region.

9229, Axonopus canescens (NEES) ALGER (TRM.
(7) Steet perennial in Corrado
woodland on deep sandy Soil.

8220, Lacenceana Marie Conduction (Soverance)

9230. Lagenocarpus VERTICILLATUS (SPR.) (TTam.)
(12) vect perennial on falus slope
at base of sandstone cliff in
cerrada woodland.

9231. Chiococca ALBA (L.) HITCH. Rubiac.

(7) Straggly Shrub 3 m. tall along banks of Stream in low gallery forest. Fruits white at maturity

DET. J. KIRKBRIDE, 1981

9232. Kylopia AROHATICA (LAM.) MART. ANNONZC.
(12) Tire 5 m x 15 cm. diem in cerrado near margin of gallery forest. Fruits green with reddish blush, DET. P.MAAS & A. VAN SETTEN 1987

n. V. Pimenta do Macaco ground fruits used as chili substitute. 9233. Paspalum GARDNERIANUH NEES (Tram
(7) Event perennial in cerrado wood12nd in dep Sandy Soil. 9234, Mesosetum cayennense Stend. Gram. (11) Grassy roads de in cerrado region. Exect perennal with stolons. Spike let publiscence brown. det. Davidre 1981. 9235. Paspalum GARDNERIANUM NEES Gram.
(II) Evect personnia in Cerrado Wood-land on dep same, joil. 9236, Rhychospora trichochaeta C.B. Clarke yperac. (12). Erect annual. Spikelets green-F ish brown. In cerrado wood tand on deep sandy soil det. T. Koyama 1981

7237. Mesosetum latifolium Swallen (Trans. (8) grassy roadside emborkine in cerrado región. Plants stoloniferos 9238. Paspalum marmoratum Kuhlm (Tram. (3) In cerrodo wood 12 nd on deep Sandy soil. Annual, decumbent at base. det. Davidse 1980. 9239. AXMODUS CANESCENS (NEES) PILGER (TIME)
(5) Erect percent in cerrado 19239 A wood land on deep sand Soil. 9240 Axonopus CANESCENS (NEES) PILGER TION (5) Evect Perennia in Cerrado woodland on deep sandy soil. 9741. Axonopus Polydactylus (Steud.) DEDECCATEM (13) Evect perchylal in Cerrado woodland on deep sandy soil. 9247. Psiffacanthus sp. det. J. Knijt 1981. Loranthac (13) Hemiparasite in rubiaceous tree Foliage dull, glancous Pedicel and overy red. Persenth Ted in lower 2/3, grading to yellow orange in apical 1/3. Fruiting

pedical dark red-purple. Fruits
dark maroon purple, growing
in

Sapota

Sapota

Tree 5 in 17/12/19 Cm diagent

(11) Tree 5 m. tall x 10 cm diam wood in gallery forest along stream.
Latex white, Immature fruits areen.

9244. FARAMER Rubiac.

(11) Erect Shrub 2 m. tall. Fruits

F green, black at maturity.

Growing in gallery forest along

Growing in gollery forest dong Small stream in certedo area. DET. J. RIRKBRIDE 1981 9245. Chomelià obtusa (C.+S.) K. Schun. Rubiac.

(11) Shrub 2 m. tall in gallery forest on bank of small stream. Fruits green turning reddish.

9246, Coccoloba sagotii Lindau Polygonec. (7) Liana 2 m. tall among shrubs

cerrado región. Fruits green. Let. R.A. Howard 1984. FEB 2 7 1980 9247. TIBOUCHINA SECT. BARBIGERAE Melastom. (12) Slender shrub 2.5 m. tall. Petals reddish violet. Style pink Margin of low gallery forest in cerrado region (DET. J. J. WURDACK,) 9248. Rheedia Guttifera (7) Shrub 2 m. tall on rocky margin of stream in gallery forest in cervado. Latex yellow, Fruit yellow at maturity. 9249 Guettarda Spruceana M. Arg. Rubiac. (7) Shrub 2 m. tall in morger of low gallery forest in cerro Lo negion of truits white. Convolvul. 9250. (8) Vine Im. tall among shrubs in cerrado, no White Tatex Corolla light magenta. 9251. Arrabidaes brachypoda (DC.) Bur. Bignonia (4) Shrub Im: tall on Land-Stone out crop in cerrado det. A. gentry 1881.

9252. Cordia superba Cham. Boraginac. (12) Low shrub 70 cm. tallin -- cerrado woodland, Corolla creamy white, det. J. Kallunki 1984.

9253. Galactia jussiaeana Kunth. Legumin. (12) Herb 70 cm. tall along roadside in cerrado area.

9254. Erect sub Shrub Im, tall. in cerrado. Corolla dank reddish purple, lower part of tube deep yellow.

9255. Sebestiania bidentata (Mart.) Pax Euphorbiac.
(10) Erect herb in open Sandy
cerrado. Latex white M.J. Huft 184.

9256 Cybianthus subg. Weigeltia Myrsinac. (7) Shrub 1.5 m. tall in margin of gellery forest in cerrado region in sandy soil Fruits Shiny green, Jet. J. Pipoly 1/82.

9257 ALIBERTIA CF. EDULIS (L.C.RICH.) A.C.RICH. RUB. (7) Tall Shrub 4 m. tall in margin of gallery forest along small stream in cerrado region Fruits light green DET. J. KIRKBRIDE 1981 9258. Phoradendron STRONGYCLADES LOTANTH. (8) Britle yellow-green hemion Erythroxylum (#9214), Infl. mustard yellow. Fruits white. In margin of gallery forest along Stieam in cerrado DET. J. KUIST 1994 9259. Moutable a exceriate Mart. Polygalac. (3) Scandent vine 3 m. tall Fruit orange det. J.J. Wurdsch 181 9260. Coccoloba latifolia Pulygon.
(11) Tree 5 m. tallet 8 cm. diam.
In, 921lery forest along small stream in cerrado. Fruits

9261. Crotalaria pallida Ait. Legum-Pail.
(4) Thrub 80 cm. tall in cerrado
Flowers yellow. Lt. R. Barnely 1981. 9262 Gardenise: Rubiac (13) of Shrub 3 m, tall in margin Small stream truits Shiny light. In cerrado region, 9263, Manihot Euphorbize
(11) Shrub 3 m. tell with long Scandent branches. Abundant White latex. Fruits green growing in margin of gallery forest along Small Streem In cerrado area.

Collectores: T. Plowman, Gr. Davidse, N.A. Rosa, C.S. Rosario and M.R. dos Santos. BRAZIL: Estado Goias. Muncipio de Tocentino polis Transama-zonian Highways, 6 km. West of Estreito (BKOD); Approx. 6°32'5, 47°32'W. 9264. Paspalum plicatulum Michy. Gram (5) Schrub wood | 2nd carrado in Shade of trees det. Davidse 1180. (6) grassy road ide Davidse 1980-910n. Cria 9266 PASPALUM CLAVULIFERUM WRIGHT (Tram (9) Gressy 1000 side in cerrado region. DET. TIFILGUEIRAS, 1998 9267. Digitario FRAGILIS (STEUD.) LUCES (Tram. (5) Grossy roadside in Cerrodo Figion. Erect annual. 9268. Hackelochloa granularis (L) KUNTZE Gram.
(9) Schrub woodland Cerrado, crect annual in open places. 9269. Panicum
(6) grassy roadside in cerrado
region Decumbent, roumably
annual.

9270. Boutelour americana (L.) Schibn. Fran. (11) grassy 10 de le merrad region. Strongly decumbent det. G. Davidse 182. 9271, Trachy pogon
(4) Sekub wood land cerrado. Erect perennial. 9272 Boutelous sinericans (L.) Scribn. Gram. (7) grassy roadside in cerrado [region: Erect annual. 9273. Cheranthe Marant.
(3) Herb in open area in cerrado
Bracts and flowers white. 9274. Heliotropium. Boraginac (9) Straggly ere there in gen are in cerrado Corolla white. 9275 I pomoca de Austin 1981. Convolval.
(6) Creeping vine in scrub wood-land in cerrado. 9276. Byrsonima Malpigh.
(10) Shrub 1.5 m. +2/1, in schub

woodland in cerrado. Fruit green.

9277. Ipomoes carajasensis D. Austin Emulea (12) Creeping prostrate vine Fin open place in scrub woodland cerrado: Corolle light magania deeper magenta et throat. det. D. F. Austin 1981 9278 Evolvulus Convolvuli (11) Prostrate vm Basal part of tube white, upper part foto and lobes Sky blue. In open place in schub woodland in Cerrado -9279 Blepharodon Sp. C. Pereira Labiat. (11) Ihrub 3 m tall in scrub woodland cerrado. Calix green at base, hood reddich purple, Corolla Twhite Filsments white Antilight brown to dark pure ?. 9280, ARAUSIA GRANDIFLORA MART. 4 Zucc. ASCLUPE (13) Clipping vine in Scrub wood Cirado Corolla tube gree at boss fotos. apically white. Lobes pure white Latex while, Flowers very tragrant (DET. R. CALLEJAS 1981)

Collectors T. Plowman, G. Davidse, N.A. Rosa, C. R. Rosario, M. R. dos Santos. PRATIL Et do de 12 16 80. Mui Brasilia Hygnway 3 de 30 mg of Toperatriz. Alt. 360 m. 28 Feb 1980 Apriox. 47°21'W 9281: Axtnopud CANESCENS (NEES) PILGER Gram.
(8) Gressy Sect perennial. 9282. Pospolum gardnerianum Nees (Fram. (3) Gressy roadside in Cerrado 1980) woodland. 9283. Axonopus Polybactylus (Steub.) Gran.
(6) Exect Dele Milliano Grassy
roadside in cerrado woodland 9284 Digitorio GARDNERI HENR. Gran (9) Trect Nova - Com 2809 roddide in cerredo wood land 9285 Aristido setifolis H.B.K. Gram. (7) Annual. Bare roadside Margin in cerrado woodland. det. G. Dovide 9286. Baralum multicaule Pair Gram (6) Annual in grass; roadside in

FEB 2 8 1980

| , |
|--|
| Cerrado Woodland. |
| 9287 Chamsecrists Supplex (Benth.) Irwin Legum. (9) Prostrate herb on grassy |
| En cerrale models Lit. R. Barn. |
| 9288 Cassia = Chamaecrista kunthiana Logur (Schl. & Cham.) Irwin i Barneby (12) Prostrate herb in grassy Frontiel in Cerrada Condland |
| Flowers yellow det. R. Barneby 1981 |
| 9289. Chamaecrista rotundifolia (Pers.) Ver- rotundifolia (11) Prostrate hero in grassy |
| Flowers yellow det. R. Borned |
| 9290. Axonopus DERBEYANUS BLACK (TIM (DET. G. DANIDSE, 1980) (3) Erect perennic più gizzano rozdside in cerra la wordland |
| 9291. AXONOPUL POLYDACTYLA (STEUD.) DEDECCA (5) Erect purent in glassy 1020 ride in CETTE do Woodland |
| 1292. Ax 5 of LA DERBEYANUS BLACK Gram. (9) Erect perennial. Foliage glaucous. In grassy roads d |
| |

9293. Tracky 2000 SPICATUS (L.P.) KUNTZE (TYZY)

(11) Stact ferennial in 9726sty

DET. T. FILOUEIRAS, 1998 Cetrado woodland

mesosetum lo lii forme (Hochst.) Chase det. Filgueiras

1894. Mesosetum altum Swallen

(9) Stolon forous Devennial

In 9125sy roadside in cerrado

woodland det Davidse 1981.





